May 9, 2002

Mr. Ron Terrell
Milestone Contractors, L.P.
P.O. Box 421459
Indianapolis, IN 46242-1459

Re: **097-12866-00086**
First Significant Revision to
FESOP 097-5501-00086

Dear Mr. Terrell.:

Milestone Contractors, L.P. was issued its initial Federally Enforceable State Operating Permit (FESOP) on February 20, 1998 for a stationary hot drum-mix asphalt plant fired primarily on natural gas with virgin #2 fuel oil and waste oil as backup fuels located at 4202 South Harding Street in Indianapolis, Indiana 46217.

On October 16, 2000, Milestone Contractors L.P. filed an Administrative Amendment request 097-12866-00086 to change record keeping fuel consumption for the drum dryer from a 365 day rolling total to a twelve (12) consecutive month rolling total.

On August 22, 2000, Hanson Aggregates, Incorporated, located at 4506 South Harding Street, Indianapolis, Indiana 46217, was issued its initial FESOP for a stationary asphalt plant under F097-12083-05160.

On February 12, 2001, Milestone Contractors, L.P. filed an Administrative Amendment request 097-13905-05160 notifying the Indiana Department of Environmental Management Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) that Milestone Contractors, L.P. purchased the former Hanson Aggregates, Incorporated stationary asphalt plant.

On March 27, 2001, Milestone Contractors, L.P. filed a Significant Permit Revision request 097-14318-05160 to allow a fuel conversion of the drum dryer burner to combust distillate fuel oil and waste oil in addition to natural gas for the former Hanson plant.

Since the two (2) existing plants are located in contiguous properties, have the same SIC code and are commonly owned and/or operated by one (1) company, they will be considered one (1) source. Because the two asphalt plants are stationary asphalt plants, Milestone Contractors, L.P. has requested that the two (2) plants be combined under one (1) FESOP. The three (3) application requests filed by Milestone will be combined in to one (1) significant permit revision which will result in the combination of the two (2) plants under one FESOP by way of this First Significant Permit Revision request, 097-12866-00086.

The incorporation of an existing collocated stationary asphalt plant, formerly Hanson Aggregates (F097-12083-05160), into Milestone's existing FESOP F097-5501-00086 will be processed as a Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(E) because:

(a) the incorporation of the existing collocated stationary asphalt plant, formerly Hanson Aggregates (F097-12083-05160) into Milestone's existing FESOP F097-5501-00086, results in an increase in unrestricted potential to emit above 25 tons for PM, PM10, SO_2, NO_x and CO. Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a Federally Enforceable State Operating Permit (FESOP) with federally enforceable limits that restrict its PTE to below the Title V emission levels such that 326 IAC 2-7 (Part 70 Permit Program) does not apply.

(b) the modification involves the conversion of the former Hanson asphalt plant dryer burner fuel firing from natural gas to virgin No. 2 distillate oil and waste oil as back up fuels and the resultant emissions from the conversion has the potential to emit in excess of 25 tons per year of PM, PM10, NO_x, CO and SO_2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mr. Mark Caraher of staff at (317) 327 -2272.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez
Administrator
Office of Environmental Services

Attachments 1st Significant Permit Revision
Technical Support Document

MBC

cc: U.S. EPA, Region V
Mindy Hahn, IDEM OAQ
Matt Mosier, OES Compliance

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY of INDIANAPOLIS
OFFICE of ENVIRONMENTAL SERVICES

Milestone Contractors, L.P.
4202 S. Harding Street
Indianapolis, Indiana 46206

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F097-5501-00086	
Issued by: Robert F. Holm, Ph.D., Administrator ERMD	Issuance Date: February 20, 1998 Expiration Date: February 20, 2003

First Administrative Amendment: F097-11768-00086	Pages Affected: 3, 4, 5, 18, 19, 19a, 27, 27a, 28, 29, 30, 31, 32, 34, 37, 38, 39
Issued by: *Jarrod Klaas, for* Mona A. Salem Chief Operating Officer Department of Public Works City of Indianapolis	Issuance Date: September 11, 2000

First Significant Permit Revision 097-12866	Pages Affected: 1, 3, 4, 4a, 5, 18, 18a, 19, ~~19a~~, 22, 22a, 27, 27a, 28 through 31, 38, 39, 39a & 39b
Issued by: Original Signed by John B. Chavez John B. Chavez Administrator Office of Environmental Services	Issuance Date: May 9, 2002

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES), and presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates two (2) stationary hot drum-mix asphalts plants fired primarily on natural gas with virgin #2 fuel oil and waste oil as backup fuels.

Responsible Official:	Ron Terrell
Source Address:	4202 S. Harding Street, Indianapolis, IN 46206
Mailing Address:	P.O. Box 421459, Indianapolis, IN 46242-1459
SIC Code:	2951
County Location:	Marion
County Status:	Nonattainment for TSP
Source Status:	Federally Enforceable State Operating Permit (FESOP) Program Minor Source under PSD and Emissions Offsets Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

The stationary source consists of the following emission units and pollution control devices:

(a) One (1) drum mix asphalt plant (Unit ID 2) with a maximum rated capacity of 500 tons per hour, equipped with one (1) 135 MM BTU/Hr burner (Unit ID 3): The primary fuel source is natural gas with virgin No. 2 distillate fuel oil and waste oil as a back up fuel. Particulate emissions are controlled by one (1) knock out box, and one (1) baghouse rated at 85,000 acfm, installed March 1993, and exhausting at stack 1.

(b) One (1) stationary hot asphalt drum mixer and aggregate dryer, unit ID: 02 (01), with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas-fired burner, also using virgin No. 2 distillate fuel oil or waste oil as a back up fuels and controlled by one (1) baghouse for particulate matter (PM) emissions, and exhausting through one (1) stack (Stack ID: 01), installed in 1996.

A.3 Insignificant Activities [326 IAC 2-7-1(20)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(a) Natural gas-fired combustion sources with a heat input equal to or less than 10 MMBTU/hr.
  (1) One (1) Gentec hot oil heater, fired by natural gas and rated at 2200 MBTU/hr. The heater exhausts at stack/vent ID 5.

(b) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than 6 MMBTU/hr.

(c) Fuel oil-fired combustion sources with heat input equal to or less than 2 MMBTU/hr and firing fuel containing less than 0.5 percent sulfur by weight.

(d) Combustion source flame safety purging on startup.

(e) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(f) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(h) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(i) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

(j) Cleaners and solvents characterized as follows: (a) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or; (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(k) Closed loop heating and cooling systems.

(l) Replacement of repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(m) Paved and unpaved roads and parking lots with public access.

(n) A laboratory as defined in 326 IAC 2-7-1(20)(C).

(o) One (1) 30,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(p) One (1) 21,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa. Installation date of 1978.

(q) One (1) 10,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(r) One (1) 20,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(s) One (1) 22,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(t) Aggregate Stock Piles and Handling, identified as 01(01), using no equipment as control, and not exhausting to a stack.

(u) Receiving Bins/Screening/Conveying, identified as 01(04), using no equipment as control, and not exhausting to a stack.

(v) Product Storage Bins, identified as 02(02), using no equipment as control, and not exhausting to a stack.

(w) Truck Loadout, identified as 02(03), using no equipment as control, and not exhausting to a stack.

(x) Asphalt Tank and Heater, identified as 02(04), using no equipment as control, and not exhausting to a stack.

(y) Haulroad and Yard Area, identified as 01(05), using no equipment as control, and not exhausting to a stack.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Office of Environmental Services (OES) and the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions Superseded [326 IAC 2]

The terms and conditions of this permit incorporate all the current applicable requirements for all emission units located at this source and supersede all terms and conditions in all registrations and permits, including construction permits, issued prior to the date of issuance of this permit. All terms and conditions in such registrations and permits are no longer in effect.

property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions for Emission Unit ID 2 shall be controlled according to the plan resubmitted on May 28, 1998. The plan consists of:

1. Fugitive particulate matter (dust) emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following measures:

   A. Paved roads and parking lots:

      a. Cleaning by vacuum sweeping on an as needed basis (monthly at a minimum).
      b. Power brooming while wet either from rain or application of water.

   B. Unpaved roads and parking lots:

      a. Treating with emulsified asphalt on an as needed basis.
      b. Treating with water on an as needed basis.

2. Fugitive particulate matter (dust) emissions from aggregate stockpiles shall be controlled by one or more of the following measures:

   A. Maintain minimum size and number of stock piles of aggregate.
   B. Treating around the stockpile area with emulsified asphalt on an as needed basis.
   C. Treating around the stockpile area with water on an as needed basis.

3. Fugitive particulate matter (dust) emission from outdoor conveying of aggregates shall be controlled by the following measures.

   A. Apply water at the feed and the intermediate points on an as needed basis.

4. Fugitive particulate matter (dust) emissions resulting from the transferring of aggregates shall be controlled by one or more of the following measures:

   A. Minimize the vehicular distance between the transfer points.
   B. Enclose the transfer points.

5. Fugitive particulate matter (dust) emissions resulting from transportation of aggregate by truck, front end loader, etc. shall be controlled by one or more of the following measures:

   A. Tarping the aggregate hauling vehicles.
   B. Maintain vehicle bodies in a condition to prevent leakage.
   C. Spray the aggregates with water.
   D. Maintain an 10 MPH speed limit in the yard.

6. Fugitive particulate matter (dust) emissions resulting from the loading and unloading of shall be controlled by one or more of the following measures:

   A. Reduce free fall distance to a minimum.
   B. Reduce the rate of discharge of the aggregate.

“An as needed basis” means the frequency or quantity of application necessary to minimize visible particulate matter emissions.

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions for Emission Unit ID 02(01) shall be controlled according to the plan submitted on October 29, 1997. The plan does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). The plan consists of:

(a) the dust from the roads be swept or treated with water or dust suppressant on an as needed basis; and

(b) the dust from the handling and storage of all materials be treated with water or dust suppressant on an as needed basis.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

(a) All air pollution control equipment listed in this permit shall be operated at all times that the emission unit vented to the control equipment is in operation, as described in Section D of this permit.

C.8 Stack Height [326 IAC 1-7]

(a) The Permittee shall comply with the provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

(b) Any change in an applicable stack shall require prior approval from IDEM, OAQ.

C.9 Asbestos Abatement Projects - Accreditation [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Prior to the commencement of any demolition or renovation activities, the Permittee shall use an Indiana accredited asbestos inspector to inspect thoroughly the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-2.1]

(a) All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Data Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

no later than thirty-five (35) days before the intended test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation with five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

period.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

If a regulated substance, subject to 40 CFR 68, is present in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to ERMD and IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to ERMD and IDEM, OAQ, that the Risk Management Plan is being properly implemented.

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(a) One (1) drum mix asphalt plant (Unit ID 2) with a maximum rated capacity of 500 tons per hour, equipped with one (1) 135 MM BTU/Hr burner (Unit ID 3): The primary fuel source is natural gas with virgin No. 2 distillate fuel oil and waste oil as a back up fuels. Particulate emissions are controlled by one (1) knock out box, and one (1) baghouse rated at 85,000 acfm, installed March 1993, and exhausting at stack 1.

(b) One (1) stationary hot asphalt drum mixer and aggregate dryer, unit ID 02 (01), with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas-fired burner, also using virgin No. 2 distillate fuel oil or waste oil as a back up fuels and controlled by one (1) baghouse for particulate matter (PM) emissions, and exhausting through one (1) stack (Stack ID: 01). Installed in 1996.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Nitrogen Oxides (NOx)-Emission Limitations [326 IAC 2-8-4(1)]

Pursuant to 326 IAC 2-8-4, the input usage of natural gas to the drum mixer burner for Emission Unit ID 02 and Emission Unit ID 02(01) shall be limited to a combined total of 694.5 MMCF per rolling twelve (12) consecutive month period. For purposes of determining compliance for Nitrogen Oxide emissions, every 1000 gallons of waste oil burned shall be equivalent to 0.057 MMCF of natural gas, and every 1000 gallons of virgin No. 2 distillate fuel oil shall be equivalent to 0.086 MMCF of natural gas. This limit is equivalent to nitrogen oxide emissions of 97.2 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Prevention of Significant Deterioration (40 CFR 52.21) rules and the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

D.1.2 Sulfur Dioxide (SO_2)-Emission Limitations [326 IAC 7-1.1-2, 2-8-4(1)]

Pursuant to 326 IAC 7-1.1-2, and 326 IAC 2-8-4(1) the sulfur dioxide emissions shall be limited as follows;

a) The percent sulfur in waste oil/ residual oil burned shall not exceed 0.75 percent sulfur by weight. This limit satisfies the requirements of 326 IAC 7-1.1-2.

b) When using No. 2 distillate fuel oil the SO_2 emissions from Emission Unit ID 02 and Emission Unit ID 02(01) dryer burner each shall be limited to 0.5 pounds per million BTU heat input, or a sulfur content of less than or equal to 0.5 percent. This limit satisfies the requirements of 326 IAC 7-1.1-2.

c) Pursuant to 326 IAC 2-8-4(1), the combined total input usage of virgin No. 2 distillate fuel oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,522 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the Sulfur Dioxide emissions, every 1000 gallons of waste oil burned shall be equivalent to 1.02 kgal of virgin No. 2 distillate fuel oil and every million cubic feet of natural gas shall be equivalent to 0.008 kgal of virgin No. 2 distillate fuel oil. This limit is equivalent to sulfur dioxide emissions of 99.0 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

D.1.3 Particulate Matter (PM)-Emission Limitations [326 IAC 6-1-2][326 IAC 12][40 CFR 60.990, Subpart I]

(a) That pursuant to 326 IAC 6-1-2, particulate matter (PM) emissions from the asphalt plant drum dryer mixer and burner for Emission Unit ID 2 shall not exceed 0.030 grains per dry standard cubic foot. This limit satisfies the requirements of New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I).

(b) That pursuant to 326 IAC 6-1-2, particulate matter emissions from the asphalt drum dryer mixer and burner for Emission Unit ID 02(01) shall not exceed 0.030 grains per dry standard cubic foot. This limit satisfies the requirements of New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I).

Compliance with 326 IAC 6-1-2(a) will satisfy 326 IAC 12 and 40 CFR 60.90 Subpart I.

D.1.4 Particulate Matter less than Ten (10) Microns (PM10) [326 IAC 2-8-4(1)])

(a) That pursuant to 326 IAC 2-8-4(1), particulate matter less than ten (10) microns (PM-10) emissions from the asphalt plant drum dryer mixer and burner for Emission Unit ID 2 shall not exceed 0.02 pounds PM10 per ton of product including both filterable and condensible fractions. Compliance with this limit shall satisfy 326 IAC 2-8-4. Therefore, the Part 70 Permit Program rules do not apply.

(b) That pursuant to 326 IAC 2-8-4(1), particulate matter less than ten (10) microns (PM-10) emissions from the asphalt plant drum dryer mixer and burner for Emission Unit ID 02(01) shall not exceed 0.02 pounds PM10 per ton of product including both filterable and condensible fractions. Compliance with this limit shall satisfy 326 IAC 2-8-4. Therefore, the Part 70 Permit Program rules do not apply.

(c) Pursuant to 326 IAC 2-8-4(1), the combined total input usage of waste oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,234.3 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the PM10 emissions, every 1000 gallons of virgin No. 2 distillate fuel oil burned shall be equivalent to 0.03 kgal of waste oil and every million cubic feet of natural gas shall be equivalent to 0.13 kgal of waste oil. This limit is equivalent to PM10 emissions of 71.5 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

D.1.5 Opacity Limitations [40 CFR 60.90 Subpart I][326 IAC 12}[326 IAC 5-1]

Pursuant to 40 CFR 60.90 Subpart I, 326 IAC 12 and 326 IAC 5-1, opacity from the asphalt plant drum dryer mixer and burner for Emission Unit ID 02 and Emission Unit ID 02(01) each shall not exceed twenty percent (20%) opacity. Compliance with this limit will satisfy 326 IAC 5-1.

D.1.6 Volatile Organic Compound (VOC) [326 IAC 2-8-4][326 IAC 8-5-2]

(a) Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3880.0 tons of VOC solvent per rolling twelve(12) consecutive month period. This is equivalent to limiting the VOC emitted from solvent use, based on 2.5% of the VOC solvent evaporating, to less than 97.0 tons per rolling twelve (12) consecutive month period such that 326 IAC 2-7 does not apply.

(b) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing mor than seven percent (7%) oil distillate by volume of emulsion for any paving application except:

(1) penetrating prime coating,
(2) stockpile storage, and
(3) applications during the months of November through March.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Emission Unit ID 2 and Emission Unit ID 02(01) and any control devices.

D.1.8 Used Oil Requirements

The waste oil burned in the dryer/burner for Emission Unit ID 2 and Emission Unit ID 02(01) shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

(a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

(b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and

(c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

Compliance Determination Requirements

D.1.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

(a) Pursuant to 326 IAC 3-3-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight for distillate and 0.75% for waste oil by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a certification;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-2.1.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.10 Testing Requirements

During the period between 1 and 24 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM10, or other methods as approved by the Commissioner for Emission Unit ID 02(01). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10. In addition to these requirements, IDEM, OAQ and OES may require compliance testing when necessary to determine if the facility is in compliance.

D.1.11 Particulate Matter (PM) [326 IAC 2-8-4]

The baghouses for PM control shall be in operation at all times when Emission Unit ID 2 and/or Emission Unit ID 02(01) are in operation.

D.1.12 Baghouse Inspections [326 IAC 2-8-4]

An inspection shall be performed each calender quarter of all bags controlling Emission Unit ID 2 and Emission Unit ID 02(01) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Compliance Monitoring Requirements

D.1.13 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with Emission Unit ID 2 and Emission Unit ID 02(01), at least once per shift when the asphalt plant is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range of 1.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and OES and shall be calibrated at least once every six (6) months.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.15 Visible Emissions Notations

(a) Daily visible emission notations of the Emission Unit ID 2 and Emission Unit ID 02(01) dryer/burner stack exhaust(s) shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.16 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the natural gas usage limits and/or the emission limits established in Condition D.1.1.

(1) the quantity of natural gas and its equivalents combusted

(b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) thru (5) below. Records maintained for (1) thru (5) shall be complete and sufficient to establish compliance with the fuel oil usage limits and/ the limits of the sulfur content of the fuel oil.

(1) Calendar dates covered in the compliance determination period; and

(2) Monthly distillate and waste oil usage; and

(3) A twelve (12) consecutive month rolling sum of distillate oil and its waste oil equivalents

(4) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

(5) sulfur content of the oils combusted with associated Fuel supplier certifications.

If the fuel supplier certification is to be used to demonstrate compliance the following as a minimum, shall be maintained:

(i) The name of the fuel supplier; and

(ii) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and, copies of all reports required by this permit.

(c) To document compliance with Condition D.1.4(c), the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the waste oil usage limits and/or the emission limits established in Condition D.1.4(c).

(1) the quantity of waste oil and its equivalent(s) combusted

(d) To document compliance with Condition D.1.6, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the solvent usage limits and/or the emission limits established in Condition D.1.6.

(1) Calendar dates covered in the compliance determination period;

(2) Gelled asphalt binder usage per month :

(3) VOC solvent content by weight of the gelled asphalt used each month; and

(4) Amount of VOC solvent used in the production of cold mix asphalt and the amount of VOC emitted each month.

(e) To document compliance with Condition D.1.13 the Permittee shall maintain the following:

(1) Daily records of the inlet and outlet differential static pressure; and

(2) Documentation of all response steps implemented, per event .

(3) All instruments and equipment shall be calibrated, maintained, and operated according to manufacturers specifications.

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(f) To document compliance with Condition D.1.15 the Permittee shall maintain records of daily visible emission notations of Emission Unit ID 2 and Emission Unit ID 02(01) dryer/burner stack exhaust.

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2, D.1.4 and D.1.6 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA
FESOP Quarterly Report

Source Name: Milestone Contractors
Source Address: 4202 S. Harding St.
FESOP No.: F097-5501-00086
Facility: Dryer/ Burner for Emission Unit ID 2 and Emission Unit ID 02(01)
Parameter: SO_2 Emissions
Limit: The combined total input usage of virgin No. 2 distillate fuel oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,522 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the Sulfur Dioxide emissions, every 1000 gallons of waste oil burned shall be equivalent to 1.02 kgal of virgin No. 2 distillate fuel oil and every million cubic feet of natural gas shall be equivalent to 0.008 kgal of virgin No. 2 distillate fuel oil. This limit is equivalent to sulfur dioxide emissions of 99.0 tons per rolling twelve (12) consecutive month period.

Quarter _____Year_____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	# 2 Virgin Distillate Oil and equivalent usage this month (gallons)		# 2 Virgin Distillate Oil and equivalent usage previous 11 months (gallons)		12 Month total # 2 Virgin Distillate Oil and equivalent usage (gallons)	
	# 2 Virgin Distillate Oil	Equivalents	# 2 Virgin Distillate Oil	Equivalents	# 2 Virgin Distillate Oil	Equivalents
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES, AIR QUALITY MANAGEMENT SECTION
FESOP Quarterly Report

Source Name: Milestone Contractors
Source Address: 4202 S. Harding St., Indianapolis, IN. 46206
FESOP No.: F097-5501-00086
Facility: Emission Unit ID 2 and Emission Unit ID 02(01) dryer burners
Parameter: oxides of nitrogen
Limit: The input usage of natural gas ~~in~~ to the drum mixer burner for Emission Unit ID 02 and Emission Unit ID 02(01) shall be limited to a combined total of 694.5 MMCF per rolling twelve (12) consecutive month period. For purposes of determining compliance for Nitrogen Oxide emissions, every 1000 gallons of waste oil burned shall be equivalent to 0.057 MMCF of natural gas, and every 1000 gallons of virgin No. 2 distillate fuel oil shall be equivalent to 0.086 MMCF of natural gas. This limit is equivalent to nitrogen oxide emissions of 97.2 tons per rolling twelve (12) consecutive month period.

Quarter _____Year_____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	Natural Gas and equivalent usage this month (MMCF)		Natural Gas and equivalent usage previous 11 months (MMCF)		12 Month total Natural Gas and equivalent usage (MMCF)	
	Natural Gas	Equivalents	Natural Gas	Equivalents	Natural Gas	Equivalents
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES, AIR QUALITY MANAGEMENT SECTION
FESOP Quarterly Report

Source Name: Milestone Contractors
Source Address: 4202 S. Harding St.
FESOP No.: F097-5501-00086
Facility: Dryer/ Burner for Emission Unit ID 2 and Emission Unit ID 02(01)
Parameter: PM10 Emissions
Limit: The combined total input usage of waste oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,234.3 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the PM10 emissions, every 1000 gallons of virgin No. 2 distillate fuel oil burned shall be equivalent to 0.03 kgal of waste oil and every million cubic feet of natural gas burned shall be equivalent to 0.13 kgal of waste oil. This limit is equivalent to PM10 emissions of 71.5 tons per rolling twelve (12) consecutive month period.

Quarter _____Year_____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	Waste oil and equivalent usage this month (gallons)		Waste oil and equivalent usage previous 11 months (gallons)		12 Month total Waste oil and equivalent usage (gallons)	
	Waste Oil	Equivalents	Waste Oil	Equivalents	Waste Oil	Equivalents
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES, AIR QUALITY MANAGEMENT SECTION
FESOP Quarterly Report

Source Name: Milestone Contractors
Source Address: 4202 S. Harding St.
FESOP No.: F097-5501-00086
Facility: Solvent Usage in Gelled Asphalt Cold Mix Asphalt Production
Parameter: VOC usage
Limit: Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3880.0 tons of VOC solvent used per rolling twelve(12) consecutive month period. This is equivalent to limiting VOC emissions to less than 97.0 tons per rolling twelve (12) consecutive month period such that 326 IAC 2-7 does not apply.

Quarter _____ Year _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	**Milestone Contractors, L.P.**
Source Location:	**4202 South Harding Street**
County:	**Marion**
SIC Code:	**2951**
Operation Permit No.:	**F097-5501-00086**
Operation Permit Issuance Date:	**February 20, 1998**
Permit Modification No.:	**097-12866-00086**
Permit Reviewer:	**M. Caraher**

The Indiana Department of Environmental Management Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a permit revision application from Milestone Contractors, L.P. relating to Milestone's purchase of an existing collocated stationary asphalt plant (formerly Hanson Aggregates, Incorporated) resulting in the combination of two (2) previously existing FESOP sources under one FESOP. The processing of this Significant Permit Revision will allow the two (2) stationary asphalt plants to share fuel and/or aggregate throughput limitations under one FESOP such that 326 IAC 2-7 (Part 70 Permit Program) will not apply.

Milestone Contractors, L.P. also requests that their existing FESOP, F097-5501-00086, issued February 20, 1998 be administratively amended to change record keeping fuel consumption for the drum dryer from a 365 day rolling total to a twelve (12) consecutive month rolling total.

In addition, Milestone Contractors, L.P. requests that the collocated source they purchased, formerly Hanson Aggregates, Incorporated operating under F097-12083-05160 and issued August 22, 2000, be allowed a fuel conversion of the drum dryer burner to combust virgin # 2 distillate fuel oil and re-refined oil (waste oil) in addition to natural gas.

History

On February 20, 1998, Milestone Contractors L.P. was issued its initial FESOP for a stationary asphalt plant under F097-5501-00086. On October 16, 2000, Milestone Contractors L.P. filed an Administrative Amendment request 097-12866-00086 to change record keeping fuel consumption for the drum dryer from a 365 day rolling total to a twelve (12) consecutive month rolling total.

On August 22, 2000, Hanson Aggregates, Incorporated was issued its initial FESOP for a stationary asphalt plant under F097-12083-05160. On February 12, 2001, Milestone filed an Administrative Amendment request notifying the Indiana Department of Environmental Management Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) that Milestone Contractors, L.P. purchased the former Hanson Aggregates, Incorporated stationary asphalt plant. On March 27, 2001, Milestone Contractors, L.P. filed a significant permit revision request to allow a fuel conversion of the drum dryer burner to combust distillate fuel oil and waste oil in addition to natural gas for the former Hanson plant.

Source Definition

This source consists of two (2) stationary asphalt plants:

(a) Plant 11 (F097-5501-00086) is located at 4202 South Harding Street, Indianapolis, Indiana 46217; and

(b) Plant 17 (previously F097-12083-05160) is located at 4506 South Harding Street, Indianapolis, Indiana 46217.

Milestone purchased Hanson Aggregates, Incorporated's asphalt plant on February 1, 2001 and is the common owner. The former Hanson Aggregates plant and the Milestone plant are now commonly owned and operated by Milestone as of February 1, 2001.

The existing plants appear to have the same two digit SIC Code, 29, = Petroleum Refining & Related Industries and appear to have the same four digit SIC Code, 2951 = Asphalt Paving Mixtures and Blocks (asphalt concrete manufacturing, but not in refineries).

Both plants are on the same leased property but the leased property is not owned by Milestone. Both plants are separated by a third asphalt plant not owned by Milestone. Approximately, one half mile separates the plants as indicated by Milestone. As a result, the two plants appear to be adjacent and/or contiguous to each other.

Since the two (2) plants are located in contiguous properties, have the same SIC code and are commonly owned and/or operated by one (1) company, they will be considered one (1) source.

Because the two asphalt plants are stationary asphalt plants, the source has requested that the two (2) plants be combined under one (1) FESOP. The three (3) application requests filed by Milestone will be combined in to one (1) significant permit revision which will result in the combination of the two (2) plants under one FESOP by way of this First Significant Permit Revision request, 097-12866-00086.

Existing Approvals

Milestone Contractors L.P. was issued its initial FESOP F097-5501-00086 on February 20, 1998. The source has since received the following:

(a) First Administrative Amendment No.: 097-11768-00086, issued on September 11, 2000. The Administrative Amendment made the following changes:

(1) corrected typos that pertained to conflicting equipment descriptions in Section A versus Section D but were accounted for in the initial FESOP application review in the Technical Support Document and/or Reporting Forms,

(2) changed the 24,000 gallon storage tank in Condition A.3 (and Section D.2) to a 21,000 gallon storage tank constructed in 1978 and, therefore, not subject to 40 CFR 60.110b (Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction or Modification Commenced after July 23, 1984),

(3) added two (2) new storage tanks subject to 40 CFR 60.110b in Condition A.3 (and Section D.2).

(4) corrected typos that pertained to conflicting emission limitations in Conditions D.1.1, D.1.2, D.1.3 and Reporting Forms but were accounted for in the initial FESOP application review in the Technical Support Document and/or Reporting Forms.

(5) included reference methods for PM10 stack testing in Condition D.1.8 Testing Requirements.

(6) requested an increase in Condition D.1.4 limited potential to emit VOC which had been limited such that 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities) did not apply. The requested increase did not meet the classification as an Administrative Amendment and was not included in the First Administrative Amendment.

(7) requested the inclusion of the applicable requirement of 20% opacity pursuant to the New Source Performance Standard (NSPS) for asphalt plants under Subpart I. The request did not meet the classification as an Administrative Amendment and was not included in the First Administrative Amendment.

(b) Hanson Aggregates Incorporated was issued its initial FESOP F097-12083-05160 on August 22, 2000 and has received no amendments, revisions or modifications.

(c) There are currently three (3) open applications as of the drafting of this revision. The applications will be combined under 097-12866-00086 for this review and issuance. The applications to be combined are:

(2) 097-12866-00086 filed October 16, 2000 by Milestone to change record keeping in F097-5501-00086 from 365 day rolling total to a twelve (12) month rolling total.

(3) 097-13905-05160 filed February 12, 2001 by Milestone notifying OAQ and OES that the former Hanson Aggregates, Incorporated stationary asphalt plant and operating under existing FESOP 097-12083-05160 was purchased by Milestone.

(4) 097-14318-05160 filed by Milestone on March 27, 2001 to convert the drum dryer burner in the former Hanson plant to combust distillate oil or waste oil in addition to the firing of natural gas.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary - Combined Operations

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	EU ID 2 Drum Mixer/burner	40	5	85,000	265
2	Asphalt tank	12.5	1.5	16	300
3	Asphalt tank	12.5	1.5	16	300
4	Asphalt tank	13	1.5	16	140
5	Hot oil heater	5.1	1.5	350	800
6	Fuel tank	31.5	0.25	26	Ambient
7	Asphalt tank	32	0.25	300	300
(01)	EU ID 02(01) Drum mixer/burner	11.3	4.3	56,000	230
(04)	Asphalt tank 02(04)	NA	NA	NA	NA
(04)	Hot oil heater 02(04)				

Recommendation

The staff recommends to the Administrator that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 16, 2000. Additional information was received on February 12, 2001 (Milestone's purchase of Hanson) and on March 27, 2001 (Milestone's fuel conversion request for the former Hanson plant).

Additional information was also obtained during source meetings on February 6, 2001, May 29, 2001, August 13, 2001 and March 5, 2002.

A Notice of Deficiency (NOD1) response letter was received by OES on June 13, 2001 relating to common ownership and adjacency and/or being contiguous. Additional information was also submitted by the source on August 16, 2001 relating to the combination of two (2) plants under one (1) FESOP.

Additional information was also received on March 12, 2002 and March 19, 2002 in regards to the use of cold mix asphalt VOC limitations and reporting and the resultant request by Milestone's to modify existing Condition D.1.5 in F097-5501-00086. The additional request to amend Condition D.1.5 was made to be consistent with wording in other Indiana FESOP language for cold mix VOC emissions. The March 19, 2002 information relates to the EPA de-listing of Asphalt Concrete Manufacturing from the list of major and area source categories of hazardous air pollutants in Section 112(c) of the 1990 Clean Air Act Amendments. The notice published in the February 12, 2002 Federal Register de-listed asphalt plants from Section 112(c) by stating that for Asphalt Concrete Manufacturing "available data indicate that there no major sources."

Emission Calculations

See Appendix A of this document for detailed emissions calculations pages 1 through 11.

Unrestricted Potential To Emit - Prior to Issuance of FESOPs

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)		
	Milestone (097-5501-00086) Emission Units	Hanson Aggregates (097-12083-05160) Emission Units	Total Source wide Emissions after purchase
PM	41,964.2	29,246.2	71,210.4
PM-10	9,913.1	6,789.9	16,703.0
SO_2	946.1	5.41	951.5
VOC	25.0	21.0 *	46.0 *
CO	4.2	134.4	138.6
NO_x	325.3	154.9	480.2
HAP's			
highest Single HAP	7.9	6.6	7.9
TOTAL HAP's	15.0	17.8	32.8

Note: For the purpose of determining Title V applicability for particulates,

PM-10, not PM, is the regulated pollutant in consideration.

* Upon review of the initial issuance Technical Support Document for F097-12083-05160, it is determined that the potential to emit 21.0 tons VOC per year is in error. Hanson Aggregates did not produce cutback asphalt and was not permitted to do so. The initial TSD VOC potential to emit was never modified during the initial FESOP review to correctly reflect that the source did not produce cutback asphalt and had source wide VOC potential to emit of, approximately, 3.3 tons per year from natural gas combustion (see TSD Appendix A page 1 of 11).

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO_2, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 (Part 70 Permit Program).

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is greater than ten (10) tons per year and any combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 (Part 70 Permit Program).

(c) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a Federally Enforceable State Operating Permit (FESOP) with federally enforceable limits that restrict its PTE to below the Title V emission levels such that 326 IAC 2-7 (Part 70 Permit Program) does not apply.

(d) Fugitive Emissions
Since this source has an applicable New Source Performance Standard that was in effect on August 7, 1980, the fugitive particulate matter emissions are counted toward determination of Prevention of Significant Deterioration (PSD) and Emission Offset applicability.

(e) The incorporation of an existing collocated stationary asphalt plant, formerly Hanson Aggregates (F097-12083-05160), into Milestone's existing FESOP F097-5501-00086 will be processed as a Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(E) because:

(a) the incorporation of the existing collocated stationary asphalt plant, formerly Hanson Aggregates (F097-12083-05160) into Milestone's existing FESOP F097-5501-00086, results in an increase in unrestricted potential to emit above 25 tons for PM, PM10, SO_2, NO_x and CO. Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a Federally Enforceable State Operating Permit (FESOP) with federally enforceable limits that restrict its PTE to below the Title V emission levels such that 326 IAC 2-7 (Part 70 Permit Program) does not apply.

(b) the modification involves the conversion of the former Hanson asphalt plant dryer burner fuel firing from natural gas to virgin No. 2 distillate oil and waste oil as back up fuels and the resultant emissions from the conversion has the potential to emit in excess of 25 tons per year of PM, PM10, NO_x, CO and SO_2 (see below and TSD Appendix A pages 1 and 7 of 11, Emission Unit ID 02(01)).

Pollutant	Potential to Emit of the Fuel Conversion for the former Hanson Aggregates (tons/year)
PM	270.3
PM-10	240.7
SO_2	338.9
VOC	3.2
CO	49.7
NO_x	101.37
Highest Single HAP (Formaldehyde)	4.7
Highest Combination HAP	15.3

Actual Emissions

The following table shows the actual emissions from the source (F097-5501-00086). This information reflects the 2000 OAQ emission data. No year 2000 emission data has been received from the former Hanson Aggregates operating under F097-12083-05160.

Pollutant	Actual Emissions (tons/year)
PM	12.9
PM-10	7.3
SO_2	0.1
VOC	0.6
CO	8.3
NO_x	27.6
HAP (specify)	Not Reported

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Emission Unit ID 2 Aggregate dryer/burner	87.9	87.9	99.0	1.9	29.2	97.2	6.8 / 11.6
Emission Unit ID 02(01) Aggregate dryer/burner							
Cold Mix Asphalt	0.0	0.0	0.0	97.0	0.0	0.0	0.0
Total fugitive (unpaved roads, storage piles, conveying and handling)	25.3	11.0	0.0	0.0	0.0	0.0	0.0
Insignificant Activities	0.14	0.14	0.02	0.1	1.5	1.8	0.0
Total Emissions	113.3	99.0	99.0	99.0	30.7	99.0	6.8 / 11.6

See discussion under **State Rule Applicability - Entire Source** for a complete discussion of how potential to emit is limited such that 326 IAC 2-7 (Part 70 Permit Program) does not apply.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment

CO	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) Because each asphalt plant, Emission Unit ID 2 and Emission Unit ID 02(01), commenced construction after June 11, 1973, each existing stationary asphalt plant (Emission Unit ID 2 and Emission Unit ID 02(01)) is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I). Pursuant to NSPS, the following apply:

(1) Performance tests are required as specified in this Subpart and as outlined in Part 60.8. The most recent stack test for the existing Milestone plant operating under F097-5501-00086 (Emission Unit ID 2) was in June 1995. PM emissions were determined to be 0.002 grains/dscf and 0.58 pounds per hour. The most recent stack test for the former Hanson Aggregates plant operating under F097-12083-05160 (Emission Unit ID 02(01)) was in August 1996. PM emissions were determined to be 0.01 grains/dscf and 4.3 pounds per hour.

(2) On or after the date on which the performance tests are completed, no owner or operator subject to the provisions of Subpart I shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

(i) Contain particulate matter in excess of 0.04 grains/dscf
(ii) Exhibit 20 percent opacity, or greater

(b) Three (3) of the four (4) volatile organic liquid (VOL) storage tanks classified as an Insignificant Activity under F097-5501-00086 are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) because each tank was constructed after July 23, 1984 and each storage tank capacity is greater than 40 cubic meters (approximately, 10,568 gallons). Pursuant to NSPS, the following apply:

The 30,000 gallon storage tank, the 22,000 gallon storage tank and the 20,000 gallon storage tank each shall comply with the New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR Part 60.116b, Subpart Kb). 40 CFR Part 60.116b requires the permittee to maintain accessible records showing the dimension of each storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank(s). In addition, the owner or operator shall notify the Administrator when the maximum true vapor pressure of any VOL stored in these vessels exceeds 27.6 kPa or 4.0 psia.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) on March 15, 1996. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-2 (Prevention of Significant Deterioration Requirements)

Each existing asphalt plant has unrestricted potential to emit PM10, SO_2 and NO_x in excess of 250 tons per year and is therefore a major source pursuant to 326 IAC 2-2-1(p)(2). In addition, each asphalt plant is subject to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.90

Subpart I that was in effect as of August 7, 1980. Therefore, fugitive PM emissions are counted in the source wide potential to emit.

Each asphalt plant has opted to limit potential to emit PM10, SO_2 and NO_x to less than 100 tons per year under 326 IAC 2-8 (Federally Enforceable State Operating Permit Program) such that 326 IAC 2-2 and 326 IAC 2-7 (Part 70 Permit Program) will not apply (see discussion under 326 IAC 2-8).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

Each existing stationary plant was in existence prior to July 27, 1997 and each existing asphalt plant has unrestricted potential to emit of less than ten (10) tons of any single HAP and less than twenty five (25) tons of any combination of HAPs. As a result, each plant predates the applicability date for construction or reconstruction of major HAP sources of July 27, 1997. Limiting fuel consumption for NO_x, SO_2 and PM10 emissions such that 326 IAC 2-7 (Part 70 Permit Program) effectively limits HAP emissions to less than ten (10) tons per year of any single HAP and to less than twenty five (25) tons per year of any combination of HAP (see TSD Appendix A pages 7 and 11 of 11). Therefore, 326 IAC 2-4.1 does not apply to this source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and/or NO_x in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-8 (Federally Enforceable State Operating Permit Program)

The source has potential to emit PM10, SO_2 and NO_x in excess of 100 tons per year and has opted to have potential to emit enforceably restricted under 326 IAC 2-8 (Federally Enforceable State Operating Permit Program) to less than the major source threshold. The source has requested a change in its current FESOP (F097-5501-00086) to add an existing collocated stationary asphalt plant (F097-12083-05160) and convert the purchased plant's dryer burner to combust distillate oil and waste oil in addition to natural gas firing. The source also is requesting that fuel consumption record keeping for the drum dryer of the existing asphalt plant (Emission Unit ID 2) be changed from a rolling 365 day total to a twelve (12) consecutive month rolling total.

Pursuant to 326 IAC 2-8-11.1(f)(1)(E) and (G), the addition of the existing collocated stationary asphalt plant to F097-5501-00086 qualifies as a significant permit revision because the potential to emit PM10, SO_2, VOC and NO_x exceeds twenty five (25) tons per year.

The following table lists the unrestricted potential to emit in tons per year of the combined operations after conversion of the former Hanson Aggregates plant to # 2 distillate oil and waste oil firing as back up fuels, the relaxation of a previously applicable VOC limitation for cold mix emissions under 326 IAC 8-1-6 of 21.7 tons per year (see TSD discussion under 326 IAC 8-1-6) and the change in the NO_x emission factor for natural gas firing from 550 pounds per MMCF to 280 pounds per MMCF(see TSD Appendix A pages 1 through 11).

Modified Source Wide Unrestricted Potential to Emit after Combined Operations, Conversion to # 2 Oil or Waste Oil Firing, Relaxation of 326 IAC 8-1-6 and Adjustment of the NO_x Emission Factor for Natural Gas Combustion

Process	PM	PM10	SO2	NOx	CO	VOC	Highest HAP	Combination of HAP
Dryer Fuel use	530.61	472.57	665.33	324.99	97.5	6.38	11.5	37.4

Dryer	70737.00	16381.20	0.00	0.00	0.00	0.00	0.00	0.00
Unpaved Roads	16.47	6.84	0.00	0.00	0.00	0.00	0.00	0.00
Handling	7.63	3.66	0.00	0.00	0.00	0.00	0.00	0.00
Storage Piles	1.18	0.5	0.00	0.00	0.00	0.00	0.00	0.00
Cold Mix	0.00	0.00	0.00	0.00	0.00	97.0	0.00	0.00
Insignific ant Activities	0.14	0.14	0.02	1.76	1.48	0.10	0.00	0.00
Total	71293.02	16864.91	665.35	326.75	98.98	103.48	11.5	37.4

The combination of the two (2) plants results in the combined worst case unlimited potential to emit in tons per year for the dryer burners as follows: (see below and TSD Appendix A page 11 of 11)

Dryer Fuel	PM/PM10	SO2	NOx	VOC	CO	Single HAP	HAPs
Natural Gas	8.8	0.7	**324.9**	6.4	97.5	11.5	19.7
# 2 Oil	16.9	650.8	199.0	1.7	41.5	11.5	32.4
Waste Oil	**530.6**	**665.3**	132.7	0.8	17.4	11.5	37.2

NO_x Limitation

For NO_x emissions, other plant wide emissions must be subtracted from a 99.0 ton per year fuel cap as follows: 99.0 tons per year - 1.76 tons per year from two hot oil heaters = 97.2 tons NOx per year to allot under a natural gas or its equivalents fuel consumption cap. Hanson Aggregates initial FESOP review utilized a NO_x, emission factor of 190 pounds per million cubic foot of gas whereas Milestone's initial FESOP utilized a NO_x emission factor of 550 pounds per million cubic foot of gas. The AP-42 emission factor in Table 1.4-2 was revised in July 1998 to 280 pounds per million cubic foot of gas and was the emission factor utilized in this review to set natural gas consumption and equivalencies (see TSD Appendix A pages 1 and 11 of 11). The resultant worst case natural gas fuel use yields 324.9 tons per year. In order to limit NO_x emissions to 97.2 tons per year such that 326 IAC 2-7 (Part 70 Permit Program) does not apply, the following equation estimates the natural gas fuel cap (see TSD Appendix A page 11 of 11):

{97.2 tons per year / 324.9 tons per year} x 2321 MMCF combined max natural gas consumption = 694.5 MMCF per year limited natural gas fuel consumption

Fuel equivalencies were set (see TSD Appendix A page 11 of 11) such that equivalent usage(s) of backup fuels are limited such that 326 IAC 2-7 (Part 70 Permit Program) does not apply. Pursuant to 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), the input usage of natural gas to the drum mixer burner for Emission Unit ID 02 and Emission Unit ID 02(01) shall be limited to a combined total of 694.5 MMCF per rolling twelve (12) consecutive month period. For purposes of determining compliance for Nitrogen Oxide emissions, every 1000 gallons of waste oil burned shall be equivalent to 0.057 MMCF of natural gas, and every 1000 gallons of virgin No. 2 distillate fuel oil shall be equivalent to 0.086 MMCF of natural gas. This limit is equivalent to nitrogen oxide emissions of 97.2 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Prevention of Significant Deterioration (40 CFR 52.21) rules and the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

SO_2 Limitation

For SO_2 emissions, other plant wide emissions must be subtracted from a 99.0 ton per year fuel cap

as follows: 99.0 - 0.02 from two hot oil heaters = 99.0 tons per year to allot under a virgin # 2 distillate oil or its equivalents fuel cap. The resultant distillate oil fuel use yields 650.8 tons per year. In order to limit SO_2 emissions to 99.0 tons per year such that 326 IAC 2-7 (Part 70 Permit Program) does not apply, the following equation estimates the distillate oil fuel cap (see TSD Appendix A page 11 of 11):

{99.0 tons per year / 650.8 tons per year} x 16581.4 kgals combined virgin # 2 distillate oil max consumption = 2,522 kgals/yr per year limited combined virgin # 2 distillate oil fuel consumption

Fuel equivalencies were set (see TSD Appendix A page 11 of 11) such that equivalent usage(s) of backup fuels are limited such that 326 IAC 2-7 (Part 70 Permit Program) does not apply. Pursuant to 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), the combined total input usage of virgin # 2 distillate oil fuel use for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,522 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the Sulfur Dioxide emissions, every 1000 gallons of waste oil consumption shall be equivalent to 1.02 kgal of virgin No. 2 distillate fuel oil consumption, and every million cubic feet of natural gas shall be equivalent to 0.008 kgal of virgin No. 2 distillate fuel oil consumption. This limit is equivalent to sulfur dioxide emissions of 99.0 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

PM10 Limitation

For PM10 emissions, other plant wide emissions must be subtracted from a 99.0 ton per year fuel cap as follows: 99.0 - (16381.2 * (1 - control efficiency)) from aggregate drying - 6.84 from unpaved roads - 3.66 from material handling - 0.5 from storage piles - 0.14 from hot oil heaters = 71.48 tons per year to allot under a waste oil or its equivalents fuel cap. The resultant max waste oil fuel use yields 530.6 tons per year. In order to limit PM10 emissions to 71.5 tons per year such that 326 IAC 2-7 (Part 70 Permit Program) does not apply, the following equation estimates the waste oil cap (see TSD Appendix A page 11 of 11):

71.5 tons per year / 530.6 tons per year} x 16581.4 kgals combined waste oil max consumption = 2,234.3 kgals/yr per year limited waste oil consumption

Fuel equivalencies were set (see TSD Appendix A page 11 of 11) such that equivalent usage(s) of backup fuels are limited such that 326 IAC 2-7 (Part 70 Permit Program) does not apply. Pursuant to 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), the combined total input usage of waste oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,234.3 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the PM10 emissions, every 1000 gallons of waste oil burned shall be equivalent to 0.03 kgal of virgin # 2 distillate oil and every million cubic feet of natural gas shall be equivalent to 0.13 kgal of waste oil. This limit is equivalent to PM10 emissions of 71.5 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

In addition, there are PM10 emissions from aggregate drying dust. Existing PM10 limitations for Milestone (F097-5501-00086) and the former Hanson Aggregates (F097-12083-05160) limit only hourly PM10 emissions from aggregate drying and aggregate drying fuel combustion to, respectively, 15.4 pounds per hour and 5.54 pounds per hour. There are, approximately, 87.9 tons PM10 per year to allot under a 99.0 ton per year PM10 emissions cap for aggregate drying and aggregate dryer fuel combustion (see TSD Appendix A page 11 of 11). The most recent stack test for the existing Milestone plant operating under F097-5501-00086 (Emission Unit ID 2) was in June 1995. PM emissions were determined to be 0.002 grains/dscf and 0.58 pounds per hour. The most recent stack test for the former Hanson Aggregates plant operating under F097-12083-05160 (Emission Unit ID 02) was in August 1996. PM emissions were determined to be 0.01 grains/dscf and 4.3 pounds per hour. The source has agreed to a more stringent PM10 emission rate in pounds per ton product for the existing Emission Unit ID 2 of 0.02 pounds PM10 per ton of product and 0.03

pounds of PM10 per ton of product for Emission Unit ID 02(01) for combined aggregate drying and aggregate dryer fuel combustion for each plant such that 326 IAC 2-7 (Part 70 Permit Program) does not apply ([(0.02 pounds PM10 per ton) x (500 tons/hr) + (0.03 pounds PM10 per ton) x (350 tons/hr)] x 8760/2000 = 87.6 tons per year). The emission limitation of 0.02 and 0.03 pounds per ton of product equates to 10.0 pounds per hour (0.02 pounds PM10 per ton x 500 tons per hour = 10.0 pounds per hour). Previous stack testing determined hourly PM emissions to be in compliance with the hourly rate and, therefore, should be able to demonstrate compliance with the equivalent pounds PM10 per ton product emission limitation.

Resultant Limited Emissions at Fuel Cap(s)

Limiting fuel consumption restricts potential to emit (in tons per year) from fuel combustion to the following (see TSD Appendix A pages 7 and 11 of 11):

Dryer Fuel	PM/PM10	SO2	NOx	VOC	CO	Single HAP	HAPs
Natural Gas	2.6	0.2	**97.2**	1.9	29.2	6.8	11.6
# 2 Oil	2.5	**98.9**	30.3	0.3	6.3	---	---
Waste Oil	**71.5**	89.6	17.8	0.1	2.4	---	---

VOC Limitation

By limiting fuel combustion for the controlling pollutants, worst case potential to emit is effectively reduced to 1.9 tons per year. The two hot oil heaters contribute a combined 0.1 tons per year of VOC.

The existing Milestone plant, F097-5501-00086, had a VOC provision as Condition D.1.5 limiting VOC usage in cold mix asphalt production to 21.7 tons per rolling twelve (12) consecutive month period such that 326 IAC 8-1-6 (Volatile Organic Compound Rules: General Reduction Requirements for New Facilities) did not apply (see TSD Appendix A page 6 of 11). The former Hanson Aggregates plant, F097-12083-05160, contained no provisions for cutback asphalt production or cold mix production. IDEM, OAQ and OES agree that 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving) does apply to this source and, as a result, would not therefore be subject to 326 IAC 8-1-6. The previous FESOP determination and resultant emission limitation of 21.7 tons per rolling twelve (12) consecutive month period such that 326 IAC 8-1-6 did not apply is not being carried over in this 1st Significant Revision (see discussion below under 326 IAC 8-5-2).

For VOC emissions, other plant wide emissions must be subtracted from a 99.0 ton per year as follows: 99.0 - 1.9 from limited natural gas burner emissions + 0.1 from two hot oil heaters = 97.0 tons per year of VOC to allot for VOC from gelled asphalt or cold mix production.

Milestone submitted additional information for the purposes of this review on March 12, 2002 requesting that existing Condition D.1.5 be updated to reflect consistency with wording in other Indiana FESOP language for cold mix VOC emissions. VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3880 tons of solvent per twelve (12) consecutive month period. This is equivalent to limiting VOC emissions to 97.0 tons per rolling twelve (12) consecutive month period based on an evaporation rate of 2.5% by weight of VOC solvent (see TSD Appendix A page 6 of 11). Due to the above limit, 326 IAC 2-7 rules do not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-3 (Process Operations)

326 IAC 6-3 (Process Operations) is not applicable to this source because the source is located in Marion County and has the potential to emit PM in excess of 100 tons per year and, as a result, pursuant to 326 IAC 6-1-2(a), PM emissions are limited to 0.03 grains per dry standard cubic foot of exhaust. Fugitive plant wide emissions are regulated pursuant to 326 IAC 6-5 (Fugitive Particulate Emissions Limitations).

326 IAC 6-5 (Fugitive Particulate Emissions Limitations)

This rule requires a fugitive dust control plan for all sources with potential fugitive PM emissions in excess of 25 tons and located in nonattainment areas. Milestone Contractors, L.P., resubmitted a fugitive dust control plan on May 28, 1998. This plan was reviewed, and approved by OES. The source shall comply with all dust abatement measures contained therein.

Circle City Asphalt, which was subsequently purchased by Hanson Aggregates, Incorporated, submitted its fugitive dust plan on October 29, 1997. Milestone Contractors, L.P. purchased the existing collocated stationary asphalt plant and shall implement the measures according to the plan or resubmit an updated fugitive dust control plan for the purchased plant.

State Rule Applicability - Individual Facilities

Emission Unit ID 2 and Emission Unit ID 02(01)

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.990 Subpart I

The particulate matter emissions from the aggregate mixing and drying operation(s) are subject to the requirements of 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) because this source is located in one of the counties listed in 326 IAC 6-1-7 and is not a specifically listed source in 326 IAC 6-1-12. In addition, each plant commenced construction after June 11, 1973 and, is therefore not specifically regulated pursuant to 326 IAC 6-1-2(c). Potential to Emit Particulate Matter (PM) exceeds 100 tons per year. Pursuant to 326 IAC 6-1-2(a), PM emissions from each Emission Unit are limited to 0.03 grains per dry standard cubic foot (gr/dscf). This limitation is more stringent than the additional applicable requirement of 0.04 grains per dry standard cubic foot pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.90 (Subpart I - Standards of Performance for Hot Mix Asphalt Facilities). Therefore, pursuant to 326 IAC 6-1-2(a) and the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I):

(a) particulate matter emissions from each asphalt plant shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf). Compliance with 326 IAC 6-1-2(a) will satisfy 326 IAC 12 and 40 CFR 60.90 to 60 .93, Subpart I, and

(b) the visible emissions from the each asphalt plant shall not exceed 20 percent opacity.

In order to comply with the limitation of 0.03 gr/dscf, each drum dryer baghouse shall be in operation at all times the asphalt concrete plant is in operation. Based on stack testing performed for each Emission Unit ID, the source appears to be in compliance with the above limitation (see discussion under **Federal Rule Applicability** of this TSD).

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

This source is subject to the requirements of 326 IAC 7-1.1 because the potential to emit (PTE) of SO_2 for the worst case fuel (virgin No. 2 distillate oil) are greater than the applicable level of 25 tons per year.

Pursuant to 326 IAC 7-1.1-2(a), each aggregate dryer burner SO_2 emissions shall not exceed:

(a) five-tenths (0.5) pound per million British thermal units when combusting No. 1 and No. 2 distillate oils; or

(b) one and six-tenths (1.6) pounds per million British thermal units when combusting No. 4 fuel oil and re-refined (waste) oils.

The existing self imposed waste oil maximum sulfur content of 0.75% in F097-5501-00086 for the existing Emission Unit ID 2 is being retained for this modification to add waste oil as a backup fuel to the collocated existing stationary asphalt plant Emission Unit ID 02(01). The residual fuel oil limitation of 1.6 pounds per million BTU heat input is equivalent to 1.52% sulfur content. Pursuant to 326 IAC 2-8-4(1) compliance with a sulfur content not to exceed 0.75 % for waste oil demonstrates compliance with 326 IAC 7-1.1-2(a).

In addition, the insignificant activity level hot oil heater(s) are not subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitation), because each unit burns natural gas and each unit has potential to emit less than 25 tons per year and/or 10 pounds per hour of sulfur dioxide. Therefore, this rule does not apply to these units.

326 IAC 8-1-6 (VOC ; General reduction requirements)

This rule applies to facilities constructed as of January 1, 1980, which have the potential to emit VOC at a rate greater than 25 tons per year and which are otherwise not regulated by other provisions of 326 IAC 8 (Volatile Organic Compound Rules).

Each existing stationary asphalt plant was constructed after 1980. The former Hanson Aggregates had no provisions for VOC emissions from cutback, cold mix or gelled asphalt. The existing Milestone plant contained a cold mix condition allowing VOC limited potential to emit to 21.7 tons per rolling twelve (12) consecutive month period such that 326 IAC 8-1-6 did not apply. IDEM, OAQ and OES agree that 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving) does apply to this source and, as a result, would not therefore be subject to 326 IAC 8-1-6. The previous FESOP determination and resultant emission limitation of 21.7 tons per rolling twelve (12) consecutive month period such that 326 IAC 8-1-6 did not apply is not being carried over in this 1st Significant Revision (see discussion below under 326 IAC 8-5-2).

326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

This rule applies to any paving application operation existing as of January 1, 1980 located in Marion County. Each existing collocated stationary asphalt plant commenced operation after January 1, 1980 and is located in Marion County. Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing mor than seven percent (7%) oil distillate by volume of emulsion for any paving application except:

(a) penetrating prime coating,
(b) stockpile storage, and
(c) applications during the months of November through March.

In addition, Milestone specifically requested that language for cold mix be revised to be consistent with other Indiana Milestone FESOPs. By restricting the amount of VOC usage in gelled asphalt for cold mix production to 3880 tons of solvent, based on a 2.5% evaporation rate by weight, the source has restricted its potential to emit VOC emissions to less than 97.0 tons per year. Therefore, 326 IAC 2-7(Part 70 Permit Program) does not apply.

Three (3) Storage Tanks

326 IAC 12 (New Source Performance Standards) and 40 CFR 60.116b Subpart Kb

The 30,000 gallon storage tank, the 22,000 gallon storage tank and the 20,000 gallon storage tank

each shall comply with the New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR Part 60.116b only, Subpart Kb). 40 CFR Part 60.116b requires the permittee to maintain accessible records showing the dimension of each storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tanks. In addition, the owner or operator shall notify the Administrator when the maximum true vapor pressure of any VOL stored in these vessels exceeds 27.6 kPa or 4.0 psia.

Resultant Changes to F097-5501-00086 due to First Significant Permit Revision 097-12866

1) The Title Page page 1 of 39 was updated to reflect the name change from the City of Indianapolis Environmental Resources Management Division to the City of Indianapolis Office of Environmental Services (OES) and the Indiana Department of Environmental Management Office of Air Management (OAM) was updated to reflect the name change to Office of Air Quality (OAQ). In addition, all past references to ERMD and OAM on the revised permit pages reflect the updated name change(s) to, respectively, OES and OAQ.

Table of Contents on page 3 of 39 was changed to reflect the addition of Emission Unit ID 02(01) and the renumbering caused by the addition of a new C.18, a new D.5 Opacity Limitations and a new D.1.12 Baghouse Inspections and new D.1.13 Broken or Failed Bag Detection conditions as follows:

2) Milestone's purchase of the existing Hanson Aggregates collocated stationary asphalt plant (F097-12083-05160) and the subsequent decision to be permitted as one (1) FESOP instead of permitting under one (1) Title V Permit results in the combination of the two (2) plants under one (1) existing FESOP, F097-5501-00086. As a result, Section A.1, A.2 and A.3 are amended as follows (deletions are in strikeout and additions are in bold):

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates ~~a~~ **two (2)** stationary hot drum-mix asphalt plant**(s)** fired primarily on natural gas with virgin #2 fuel oil and waste oil as backup fuels. ~~This plant has a maximum output of 500 tons of asphalt per hour.~~

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

The stationary source consists of the following emission units and pollution control devices:

(a) One (1) drum mix asphalt plant (Unit ID 2) with a maximum rated capacity of 500 tons per hour, equipped with one (1) 135 MM BTU/Hr burner (Unit ID 2): The primary fuel source is natural gas with virgin No. 2 distillate fuel oil and waste oil as a back up fuel. Particulate emissions are controlled by one (1) knock out box, and one (1) baghouse rated at 85,000 acfm, installed March 1993, and exhausting at stack 1.

(b) One (1) stationary hot asphalt drum mixer and aggregate dryer, unit ID: 02 (01), with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas-fired burner, also using virgin No. 2 distillate fuel oil or waste oil as a back up fuels and controlled by one (1) baghouse for particulate matter (PM) emissions, and exhausting through one (1) stack (Stack ID: 01), installed in 1996.

A.3 Insignificant Activities [326 IAC 2-7-1(20)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(a) Natural gas-fired combustion sources with a heat input equal to or less than 10 MMBTU/hr.
  (1) One (1) Gentec hot oil heater, fired by natural gas and rated at 2200 MBTU/hr. The heater exhausts at stack/vent ID 5.

(b) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than 6 MMBTU/hr.

(c) Fuel oil-fired combustion sources with heat input equal to or less than 2 MMBTU/hr and firing fuel containing less than 0.5 percent sulfur by weight.

(d) Combustion source flame safety purging on startup.

(e) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(f) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(h) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(i) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

(j) Cleaners and solvents characterized as follows: (a) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or; (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(k) Closed loop heating and cooling systems.

(l) Replacement of repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(m) Paved and unpaved roads and parking lots with public access.

(n) A laboratory as defined in 326 IAC 2-7-1(20)(C).

(o) One (1) 30,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(p) One (1) 21,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa. Installation date of 1978.

(q) One (1) 10,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(r) One (1) 20,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(s) One (1) 22,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

(t) Aggregate Stock Piles and Handling, identified as 01(01), using no equipment as control, and not exhausting to a stack.

(u) Receiving Bins/Screening/Conveying, identified as 01(04), using no equipment as control, and not exhausting to a stack.

(e) Product Storage Bins, identified as 02(02), using no equipment as control, and not exhausting to a stack.

(w) Truck Loadout, identified as 02(03), using no equipment as control, and not exhausting to a stack.

(x) Asphalt Tank and Heater, identified as 02(04), using no equipment as control, and not exhausting to a stack.

(y) Haulroad and Yard Area, identified as 01(05), using no equipment as control, and not exhausting to a stack.

3) The combination of the two existing FESOP sources in to one FESOP source results in the Fugitive Dust Control Plan for each plant, submitted pursuant to 326 IAC 6-5, to be expressly stated in a revised Condition C.6 as follows:

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions **for Emission Unit ID 2** shall be controlled according to the plan resubmitted on May 28, 1998. The plan consists of:

1. Fugitive particulate matter (dust) emissions from paved roads, unpaved roads, and parking lots shall be controlled by one or more of the following measures:

   A. Paved roads and parking lots:

      a. Cleaning by vacuum sweeping on an as needed basis (monthly at a minimum).
      b. Power brooming while wet either from rain or application of water.

   B. Unpaved roads and parking lots:

      a. Treating with emulsified asphalt on an as needed basis.
      b. Treating with water on an as needed basis.

2. Fugitive particulate matter (dust) emissions from aggregate stockpiles shall be controlled by one or more of the following measures:

   A. Maintain minimum size and number of stock piles of aggregate.
   B. Treating around the stockpile area with emulsified asphalt on an as needed basis.
   C. Treating around the stockpile area with water on an as needed basis.

3. Fugitive particulate matter (dust) emission from outdoor conveying of aggregates shall be controlled by the following measures.

   A. Apply water at the feed and the intermediate points on an as needed basis.

4. Fugitive particulate matter (dust) emissions resulting from the transferring of aggregates shall be controlled by one or more of the following measures:

   A. Minimize the vehicular distance between the transfer points.
   B. Enclose the transfer points.

5. Fugitive particulate matter (dust) emissions resulting from transportation of aggregate by truck, front end loader, etc. shall be controlled by one or more of the following measures:

   A. Tarping the aggregate hauling vehicles.
   B. Maintain vehicle bodies in a condition to prevent leakage.
   C. Spray the aggregates with water.
   D. Maintain an 10 MPH speed limit in the yard.

6. Fugitive particulate matter (dust) emissions resulting from the loading and unloading of shall be controlled by one or more of the following measures:

   A. Reduce free fall distance to a minimum.
   B. Reduce the rate of discharge of the aggregate.

"An as needed basis" means the frequency or quantity of application necessary to minimize visible particulate matter emissions.

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions **for Emission Unit ID 02(01)** shall be controlled according to the plan submitted on October 29, 1997. The plan does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). The plan consists of:

(a) the dust from the roads be swept or treated with water or dust suppressant on an as needed basis; and

(b) the dust from the handling and storage of all materials be treated with water or dust suppressant on an as needed basis.

4) The inclusion of the existing Fugitive Dust Control Plan requirement(s) for the existing Emission Unit ID 02(01) extends Condition C.6 permit language listed above to a new page 18a and takes Condition C.6 requirements previously listed on page 19 to be listed on page 18a. As a result, a new page 19 needs to be reissued with page 19a condition(s) being moved to page 19 causing the deletion of page 19a which was inserted by way of the First Administrative Amendment 097-11768-00086 issued September 11, 2000 as follows:

~~Milestone Contractors, L.P. First Administrative Amendment Page 19a of 39~~
~~Indianapolis, Indiana 097-11768-00086 FESOP No. F097-5501-00086~~
~~Permit Reviewer: MBC~~

~~period.~~

~~**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**~~

~~C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]~~

5) The mandatory inclusion of two (2) FESOP model update D Section conditions, specifically, Baghouse Inspections and Broken or Failed Bag Detection reference a mandatory FESOP model update C Section condition, specifically, Compliance Response Plan -Preparation, Implementation, Records, and Reports. This C Section condition replaces the previous C.18 Compliance Monitoring Plan - Failure to Take Correction Action Condition and now states:

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps

shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

(6) The addition of the collocated existing stationary asphalt plant (F097-12083-05160) will be incorporated in to the existing FESOP for Milestone (F097-5501-00086) in the existing D.1 Section because the former Hanson Aggregates asphalt plant had many of the same existing emission

limitations and will have combined fuel use limitations such that 326 IAC 2-7 (Part 70 Permit Program) will not apply. With this revision, each emission unit will be able to burn natural gas or distillate oil or waste oil. Combined fuel use limitations imposed to stay under major source thresholds for NO_x, SO_2 and PM10 are adjusted to allow for the inclusion of the collocated existing stationary plant formerly owned and operated by Hanson Aggregates into the fuel cap(s) and emission limitations. Hanson Aggregates initial FESOP review utilized a NO_x, emission factor of 190 pounds per million cubic foot of gas whereas Milestone's initial FESOP utilized a NO_x emission factor of 550 pounds per million cubic foot of gas. The AP-42 emission factor in Table 1.4-2 was revised in July 1998 to 280 pounds per million cubic foot of gas and was the emission factor utilized in this review to set natural gas consumption and equivalencies (see TSD Appendix A pages 1 and 11 of 11).

In addition, the 40 CFR 60.90 Subpart I NSPS 20% opacity requirement was inadvertently left out of the original FESOP issued to Milestone. The NSPS opacity requirement was included in the original Hanson Aggregates FESOP. As a result, the NSPS opacity requirement is added to F097-5501-00086 with this 1st Significant Revision.

Also, record keeping and reporting requirements differed with each FESOP, where Hanson Aggregates fuel use record keeping totals were on a rolling twelve (12) consecutive month period and Milestone had a rolling 365 day fuel use record keeping requirement. Milestone specifically requested that record keeping and reporting be consistent and that record keeping should be changed to a rolling twelve (12) consecutive month period as allowed by 326 IAC 2-8-4.

In addition, Milestone indicated that they no longer produce cutback asphalt and that Hanson Aggregates never produced cutback asphalt. **Milestone requested that a gelled asphalt condition replace the cutback asphalt throughput limitation and that the quarterly reporting of cutback asphalt production be eliminated.**

Two (2) new Compliance Monitoring D Conditions Baghouse Inspections and Broken or Failed Bag Detection were incorporated with this 1st Significant Revision in order to operate properly to ensure compliance with 326 IAC 6-1-2(a), 326 IAC 12 and 40 CFR 60.90 Subpart I and 326 IAC 2-8 (FESOP).

As a result, Section D.1 is now revised to state:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(a) One (1) drum mix asphalt plant (Unit ID 2) with a maximum rated capacity of 500 tons per hour, equipped with one (1) 135 MM BTU/Hr burner (Unit ID 3): The primary fuel source is natural gas with virgin No. 2 distillate fuel oil and waste oil as a back up fuels. Particulate emissions are controlled by one (1) knock out box, and one (1) baghouse rated at 85,000 acfm, installed March 1993, and exhausting at stack 1.

(b) One (1) stationary hot asphalt drum mixer and aggregate dryer, unit ID 02 (01), with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas-fired burner, also using virgin No. 2 distillate fuel oil or waste oil as a back up fuels controlled by one (1) baghouse for particulate matter (PM) emissions, and exhausting through one (1) stack (Stack ID: 01). Installed in 1996.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Nitrogen Oxides (NOx)-Emission Limitations [326 IAC 2-8-4(1)]

Pursuant to 326 IAC 2-8-4, the input usage of natural gas ~~in~~ **to** the drum mixer burner **for Emission Unit ID 02 and Emission Unit ID 02(01)** shall be limited to **a combined total of** ~~356.4~~ **694.5** MMCF per ~~365 day period, rolled on a daily basis~~ **rolling twelve (12) consecutive month period.** For purposes of determining compliance for Nitrogen Oxide emissions, every 1000 gallons of waste oil burned shall be equivalent to ~~0.0291~~ **0.057** MMCF of natural gas, and every 1000 gallons of virgin No. 2 distillate fuel oil shall be equivalent to ~~0.0364~~ **0.086** MMCF of natural gas. This limit is equivalent to nitrogen oxide emissions of ~~98.0~~ **97.2** tons per ~~365 d ay rolling period, rolled on a daily basis~~ **rolling twelve (12) consecutive month period**. ~~During the first 365 days of operation under this permit, the input of natural gas and natural gas equivalents shall be limited such that the total MMCF divided by the accumulated calender days shall not exceed 0.976 MMCF per day.~~ Due to the above limit, the Prevention of Significant Deterioration (40 CFR 52.21) rules and the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

D.1.2 Sulfur Dioxide (SO_2)-Emission Limitations [326 IAC 7-1.1-2, 2-8-4(1)]

Pursuant to 326 IAC 7-1.1-2, and 326 IAC 2-8-4(1) the sulfur dioxide emissions shall be limited as follows;

a) The percent sulfur in waste oil/ residual oil burned shall not exceed 0.75 percent sulfur by weight. This limit satisfies the requirements of 326 IAC 7-1.1-2.

b) When using No. 2 distillate fuel oil the SO_2 emissions from **Emission Unit ID 02 and Emission Unit ID 02(01) dryer burner each** ~~the 135 MMBTU burner~~ shall be limited to .5 pounds per million BTU heat input, or a sulfur content of less than or equal to .5 percent. This limit satisfies the requirements of 326 IAC 7-1.1-2.

c) Pursuant to 326 IAC 2-8-4(1), the **combined total** input usage of ~~waste/ residual oil~~ **virgin No. 2 distillate fuel oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners** ~~in the drum mixer burner~~ shall be limited to ~~1,774,300 gallons per 365 day rolling period, rolled on a daily basis~~ **2,522 kgal per rolling twelve (12) consecutive month period.** For purposes of determining compliance with the Sulfur Dioxide emissions, every 1000 gallons of **virgin** No. 2 distillate fuel oil burned shall be equivalent to **1.02 kgal** ~~646.5 gallons~~ of waste oil, and every million cubic feet of natural gas shall be equivalent to **0.008 kgal of virgin No. 2 distillate fuel oil** ~~5.35 gallons of waste oil~~. This limit is equivalent to sulfur dioxide emissions of **99.0 tons per rolling twelve (12) consecutive month period** ~~98.12 tons per 365 day period, rolled on a daily basis~~. ~~During the first 365 days of operation under this permit, the input of waste oil equivalents shall be limited such that the total gallons divided by the accumulated calender days shall not exceed 4861 gallons per day.~~ Due to the above limit, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

D.1.3 Particulate Matter (PM)-Emission Limitations [326 IAC 6-1-2]**[326 IAC 12][40 CFR 60.990, Subpart I]**

(a) That pursuant to 326 IAC 6-1-2 ~~and 326 IAC 2-8-4~~, particulate matter (PM) emissions from the asphalt plant drum dryer mixer and burner **for Emission Unit ID 2** shall not exceed 0.030 grains per dry standard cubic foot ~~and 15.4 pounds per hour~~. This limit satisfies the requirements of New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I).

(b) That pursuant to 326 IAC 6-1-2, particulate matter emissions from the asphalt drum dryer mixer and burner for Emission Unit ID 02(01) shall not exceed 0.030 grains per dry standard cubic foot. This limit satisfies the requirements of New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I).

Compliance with 326 IAC 6-1-2(a) will satisfy 326 IAC 12 and 40 CFR 60.90 Subpart I.

D.1.4 Particulate Matter less than Ten (10) Microns (PM10) [326 IAC 2-8-4(1)])

(a) That pursuant to 326 IAC 2-8-4(1), particulate matter less than ten (10) microns (PM-10) emissions from the asphalt plant drum dryer mixer and burner for **Emission Unit ID 2** shall not exceed ~~15.4~~ **0.02 pounds PM10 per ton of product** including both filterable and condensible fractions. Compliance with this limit shall satisfy 326 IAC 2-8-4. Therefore, the Part 70 Permit Program rules do not apply.

(b) That pursuant to 326 IAC 2-8-4(1), particulate matter less than ten (10) microns (PM-10) emissions from the asphalt plant drum dryer mixer and burner for Emission Unit ID 02(01) shall not exceed 0.03 pounds PM10 per ton of product including both filterable and condensible fractions. Compliance with this limit shall satisfy 326 IAC 2-8-4. Therefore, the Part 70 Permit Program rules do not apply.

(c) Pursuant to 326 IAC 2-8-4(1), the combined total input usage of waste oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,234.3 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the PM10 emissions, every 1000 gallons of waste oil burned shall be equivalent to 0.03 kgal of virgin # 2 distillate oil, and every million cubic feet of natural gas shall be equivalent to 0.13 kgal of waste oil. This limit is equivalent to PM10 emissions of 71.5 tons per rolling twelve (12) consecutive month period. Due to the above limit, the Part 70 Permit Program (326 IAC 2-7) rules do not apply.

D.1.5 Opacity Limitations [40 CFR 60.90 Subpart I][326 IAC 12}[326 IAC 5-1]

Pursuant to 40 CFR 60.90 Subpart I, 326 IAC 12 and 326 IAC 5-1, opacity from the asphalt plant drum dryer mixer and burner for Emission Unit ID 02 and Emission Unit ID 02(01) each shall not exceed twenty percent (20%) opacity. Compliance with this limit will satisfy 326 IAC 5-1.

D.1.~~5~~**6** Volatile Organic Compound (VOC-Emission Limitations [326 IAC 2-8-4(1)][326 IAC 8-5-2]

(a) ~~The VOC usage in the production of cold mix asphalt (stockpile mix) shall be limited to 21.7 tons per consecutive twelve month period rolled monthly. During the first year the amount of liquid binder shall be limited to 238.6 tons per/month. This is equivalent to 2864 tons of binder used per twelve month period in the production of cold mix (stockpile mix) based on 1.0% diluent present in the asphalt. This production limit has been instituted in order to insure that the total emission from this source for VOC remain below twenty-five (25) tons per year such that 326 IAC 8-1-6 does not apply. Due to the above limits, the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and the Part 70 rules do not apply.~~

Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3880.0 tons of VOC solvent per rolling twelve(12) consecutive month period. This is equivalent to limiting the VOC emitted from solvent use, based on 2.5% of the VOC solvent evaporating, to less than 97.0 tons per rolling twelve (12) consecutive month period such that 326 IAC 2-7 does not apply.

(b) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing mor than seven percent (7%) oil distillate by volume of emulsion for any paving application except:

(a) penetrating prime coating,
(b) stockpile storage, and
(c) applications during the months of November through March.

D.1.~~6~~**7** Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility~~ **Emission Unit ID 2 and Emission Unit ID 02(01)** and any control

devices.

D.1.~~7~~**8** Used Oil Requirements

The waste oil burned in the dryer/burner **for Emission Unit ID 2 and Emission Unit ID 02(01)** shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

(a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

(b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and

(c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

Compliance Determination Requirements

D.1.~~8~~ **9** Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

(a) Pursuant to 326 IAC 3-3-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight for distillate, and 0.75% for waste oil by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a certification;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-2.1.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.~~9~~ **10**Testing Requirements

During the period between ~~24 and 36~~ **1 and 24** months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM10, or other methods as approved by the Commissioner **for Emission Unit ID 02(01)**. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10. In addition to these requirements, IDEM, OAQ and OES may require compliance testing when necessary to determine if the facility is in compliance.

D.1.11 Particulate Matter (PM) [326 IAC 2-8-4]

The baghouses for PM control shall be in operation at all times when Emission Unit ID 2 and/or Emission Unit ID 02(01) are in operation.

D.1.12 Baghouse Inspections [326 IAC 2-8-4]

An inspection shall be performed each calender quarter of all bags controlling Emission Unit ID 2 and Emission Unit ID 02(01) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Compliance Monitoring Requirements

D.1.~~10~~**13** Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with ~~the dryer/burner~~ **Emission Unit ID 2 and Emission Unit ID 02(01)**, at least once daily when the asphalt plant is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across ~~the~~ **each** baghouse shall be maintained within the range of 1.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.~~11~~**15** Visible Emissions Notations

(a) Daily visible emission notations of the **Emission Unit ID 2 and Emission Unit ID 02(01)** dryer/burner stack exhaust**(s)** shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part

of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.~~12~~ **16** Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken ~~daily~~ **monthly** and shall be complete and sufficient to establish compliance with the natural gas usage limits and/or the emission limits established in Condition D.1.1.

(1) the quantity of natural gas and its equivalent**(s)** combusted

(b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) thru (5) below. Records maintained for (1) thru (5) shall be complete and sufficient to establish compliance with the fuel oil usage limits and/ the limits of the sulfur content of the fuel oil.

(1) Calendar dates covered in the compliance determination period; and

(2) ~~Daily~~ **Monthly** distillate and waste oil usage; and

(c) A ~~365 day~~ **twelve (12) consecutive month** rolling sum of waste oil and its distillate oil equivalents

(4) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

(5) sulfur content of the oils combusted with associated Fuel supplier certifications.

If the fuel supplier certification is to be used to demonstrate compliance the following as a minimum, shall be maintained:

(i) The name of the fuel supplier; and

(ii) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and, copies of all reports required by this permit.

~~(c) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the following values;~~

~~(1) the amount of liquid binder used in the production of cold (stock pile) mix; and~~

~~(2) the average diluent content of the liquid binder; and~~

~~(3) the amount of cold mix (stockpile mix) produced.~~

~~(d)~~ **(c) To document compliance with Condition D.1.4(c), the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the waste oil usage limits and/or the emission limits established in Condition D.1.4(c).**

(1) the quantity of waste oil and its equivalent(s) combusted

(d) To document compliance with Condition D.1.6, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the solvent usage limits and/or the emission limits established in Condition D.1.6.

(a) Calendar dates covered in the compliance determination period;

(b) Gelled asphalt binder usage per month :

(c) VOC solvent content by weight of the gelled asphalt used each month; and

(d) Amount of VOC solvent used in the production of cold mix asphalt and the amount of VOC emitted each month.

(e) To document compliance with Condition ~~D.1.10,~~ **D.1.13** the Permittee shall maintain the following:

(1) Daily records of the inlet and outlet differential static pressure; and

(2) Documentation of all response steps implemented, per event .

(3) All instruments and equipment shall be calibrated, maintained, and operated according to manufacturers specifications.

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

~~(e)~~**(f)** To document compliance with Condition ~~D.1.11~~,**D.1.15** the Permittee shall maintain records of daily visible emission notations of ~~the~~ **Emission Unit ID 2 and Emission Unit ID 02(01)** dryer/burner stack exhaust.

~~(f)~~**(g)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.~~13~~**17** Reporting Requirements

A ~~semi-annual~~ **quarterly** summary of the information to document compliance with Condition D.1.1 **and** D.1.2, **D.1.4** ~~and D.1.5~~ and **D.1.6** shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

6) The Monthly Reporting forms were amended to reflect the name change in the Office of Air Quality and Office of Environmental Services and were amended to reflect quarterly reporting of rolling twelve (12) consecutive month fuel use limitations for NO_x and SO_2. In addition, the combination of the two asphalt plants results in fuel use limitations for PM10 and, as a result, a new PM10 quarterly report form of monthly waste oil consumption, and its equivalents, is now included. Also, there had always been a reporting requirement for VOC emissions in the existing Milestone FESOP for Emission Unit ID 2 but the original FESOP never contained any reporting forms. As a result, a VOC emission report form is included in this First Significant Revision.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR ~~MANAGEMENT~~ QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ~~ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION~~ OFFICE of ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FESOP ~~Monthly~~ Quarterly Report

Source Name: Milestone Contractors
Source Address: 4202 S. Harding St.
FESOP No.: F097-5501-00086
Facility: Dryer/ Burner **for Emission Unit ID 2 and Emission Unit ID 02(01)**
Parameter: **SO_2 Emissions**
Limit: ~~The dryer / burner shall be limited to 1,774,300 gallons of waste oil and waste oil equivalent during the last 365 day period. For purposes of determining compliance, every MMCF of natural gas burned shall be equivalent to 5.35 gallons of waste oil, based on SO2 emissions. Every 1,000 gallons of No. 2 distillate fuel oil burned with a maximum sulfur content of 0.50% shall be equivalent to 646.5 gallons of waste oil based on SO2 emissions. During the first 365 days of operation under this permit, the input of waste oil and waste oil equivalents shall be limited such that the total gallons divided by the accumulated calender days shall not exceed 4,861 gallons per day.~~

The combined total input usage of ~~waste/ residual oil~~ **virgin No. 2 distillate fuel oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners** ~~in the drum mixer burner~~ shall be limited to ~~1,774,300 gallons per 365 day rolling period, rolled on a daily basis~~ **2,522 kgal per rolling twelve (12) consecutive month period.** For purposes of determining compliance with the Sulfur Dioxide emissions, every 1000 gallons of **virgin** No. 2 distillate fuel oil burned shall be equivalent to **1.02 kgal** ~~646.5 gallons~~ of waste oil, and every million cubic feet of natural gas shall be equivalent to **0.008 kgal of virgin No. 2 distillate fuel oil** ~~5.35 gallons of waste oil~~. This limit is equivalent to sulfur dioxide emissions of **99.0 tons per rolling twelve (12) consecutive month period.**

Quarter _____Year_____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	# 2 Virgin Distillate Oil and equivalent usage this month (gallons)		# 2 Virgin Distillate Oil and equivalent usage previous 11 months (gallons)		12 Month total # 2 Virgin Distillate Oil and equivalent usage (gallons)	
	# 2 Virgin Distillate Oil	Equivalents	# 2 Virgin Distillate Oil	Equivalents	# 2 Virgin Distillate Oil	Equivalents

Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR ~~MANAGEMENT~~ QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS ~~ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION~~ OFFICE of ENVIRONMENTAL SERVICES, AIR QUALITY MANAGEMENT SECTION
FESOP ~~Monthly~~ Quarterly Report

Source Name: Milestone Contractors
Source Address: 4202 S. Harding St. , Indianapolis, IN. 46206
FESOP No.: F097-5501-00086
Facility: ~~135 MMBTU/Hr burner~~ **Emission Unit ID 2 and Emission Unit ID 02(01) dryer burners**
Parameter: oxides of nitrogen
Limit: ~~356.4 MMCF of natural gas and natural gas equivalents during the last 365 day period. For purposes of determining compliance, every 1000 gallons of No. 2 distillate fuel burned shall be equivalent to 0.0364 MMCF of natural gas based on NOx emissions, and every 1000 gallons of waste oil burned shall be equivalent to 0.0291 MMCF of natural gas based on NOx emissions. During the first 365 days of operation under this permit, the input of natural gas and natural gas equivalents shall be limited such that the total MMCF divided by the accumulated calender days shall not exceed 0.976 MMCF per day.~~ **The input usage of natural gas ~~in~~ to the drum mixer burner for Emission Unit ID 02 and Emission Unit ID 02(01) shall be limited to a combined total of ~~356.4~~ 694.5 MMCF per rolling twelve (12) consecutive month period. For purposes of determining compliance for Nitrogen Oxide emissions, every 1000 gallons of waste oil burned shall be equivalent to ~~0.0291~~ 0.057 MMCF of natural gas, and every 1000 gallons of virgin No. 2 distillate fuel oil shall be equivalent to ~~0.0364~~ 0.086 MMCF of natural gas. This limit is equivalent to nitrogen oxide emissions of ~~98.0~~ 97.2 tons per rolling twelve (12) consecutive month period.**

Quarter _____Year_____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	Natural Gas and equivalent usage this month (MMCF)		Natural Gas and equivalent usage previous 11 months (MMCF)		12 Month total Natural Gas and equivalent usage (MMCF)	
	Natural Gas	Equivalents	Natural Gas	Equivalents	Natural Gas	Equivalents
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES, AIR QUALITY MANAGEMENT SECTION
FESOP Quarterly Report

Source Name: **Milestone Contractors**
Source Address: **4202 S. Harding St.**
FESOP No.: **F097-5501-00086**
Facility: **Dryer/ Burner for Emission Unit ID 2 and Emission Unit ID 02(01)**
Parameter: **PM10 Emissions**
Limit: **The combined total input usage of waste oil for Emission Unit ID 02 and Emission Unit ID 02(01) dryer burners shall be limited to 2,234.3 kgal per rolling twelve (12) consecutive month period. For purposes of determining compliance with the PM10 emissions, every 1000 gallons of waste oil burned shall be equivalent to 0.03 kgal of virgin # 2 distillate oil, and every million cubic feet of natural gas shall be equivalent to 0.13 kgal of waste oil. This limit is equivalent to PM10 emissions of 71.5 tons per rolling twelve (12) consecutive month period.**

Quarter _____ Year _____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	Waste oil and equivalent usage this month (gallons)		Waste oil and equivalent usage previous 11 months (gallons)		12 Month total Waste oil and equivalent usage (gallons)	
	Waste Oil	Equivalents	Waste Oil	Equivalents	Waste Oil	Equivalents
Month 1						
Month 2						
Month 3						

9No deviation occurred in this quarter.
9Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES, AIR QUALITY MANAGEMENT SECTION
FESOP Quarterly Report

Source Name: **Milestone Contractors**
Source Address: **4202 S. Harding St.**
FESOP No.: **F097-5501-00086**
Facility: **Solvent Usage in Gelled Asphalt Cold Mix Asphalt Production**
Parameter: **VOC usage**
Limit: **Gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt shall not exceed 3880.0 tons of VOC solvent used per rolling twelve(12) consecutive month period. This is equivalent to limiting VOC emissions to less than 97.0 tons per rolling twelve (12) consecutive month period such that 326 IAC 2-7 does not apply.**

Quarter _____Year_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The baghouse used in conjunction with Emission Unit ID 2 and Emission Unit ID 02(01), has applicable compliance monitoring conditions as specified below:

   (a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with Emission Unit ID 2 and Emission Unit ID 02(01), at least once per shift when the asphalt plant is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range of 1.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response

steps for when the pressure reading is outside of the above mentioned range for any one reading.

(b) Daily visible emissions notations of the baghouse used in conjunction with Emission Unit ID 2 and Emission Unit ID 02(01) shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because*:*

the baghouse used in conjunction with Emission Unit ID 2 and Emission Unit ID 02(01) must operate properly to ensure compliance with 326 IAC 6-1-2(a), 326 IAC 12 and 40 CFR 60.90 Subpart I and 326 IAC 2-7 (Part 70).

Conclusion

The operation of two (2) existing collocated stationary asphalt plants shall be subject to the conditions of the attached proposed First Significant Permit Revision 097-12866-00086 to F097-5501-00086.

APPENDIX A

Unlimited and Limited Potential to Emit from Combustion

Appendix A: FESOP Emission Calculations

Company Name: Milestone Contractors
Plant Location: 4202 & 4506 South Harding Street
County: Marion
FESOP No.: F097-5501-00086
Modification #: 097-12866
Date: March 21, 2002
Permit Reviewer: MBC

Existing Stationary Plant Emission Unit ID 2

UNLIMITED POTENTIAL TO EMIT

Source	Fuel Source	Consumption Units	SCC ID Code	mmbtu/hr Rating	Annual Hrs Operation	Annual Fuel Consumption	PM10 (lb/hr)	PM10 (Ton/Yr)	PM (lb/hr)	PM (Ton/Yr)	SO2 (lb/hr)	SO2 (Ton/Yr)	NOX (lb/hr)	NOX (Ton/Yr)	VOC (lb/hr)	VOC (Ton/Yr)	CO (lb/hr)	CO (Ton/Yr)
Aggreg. Dryer	Nat gas	MMCF	10200601	135.0	8760.0	1182.6	1.03	4.49	1.03	4.49	0.08	0.35	37.80	**165.56**	0.74	**3.25**	11.34	**49.67**
Aggreg. Dryer	No. 2 oil	1000 gal		135.0	8760.0	8447.1	1.93	8.45	1.93	8.45	75.70	331.55	23.14	101.37	0.19	0.84	4.82	21.12
Aggreg. Dryer	No. 4 waste	1000 gal	10500113	135.0	8760.0	8447.1	54.96	**240.74**	61.71	**270.31**	77.38	**338.94**	15.43	67.58	0.10	0.42	2.03	8.87
Hot oil heater	Nat gas	MMCF	10200601	2.00	8760.0	17.5	0.02	0.07	0.02	0.07	0.00	0.01	0.20	0.88	0.01	0.05	0.17	0.74

NOTE: Assume that the heating value of natural gas is 1000 Btu / Cubic Foot, distillate oil is 0.14 MMBtu / Gallon, residual oil is 0.15 MMBtu / Gallon, LPG is 0.094 MMBtu / Gallon.

	LPG	
	10201001	10201002
	Butane	Propane
UNITS	Lb/ 1000 Gallons	
PM	0.6	0.6
PM-10	0.28	0.26
SO2	0.09	0.1
NOx	21	19
VOC	0.26	0.25
CO	3.6	3.2
SOURCE	FIRE 5.0	

	Residual Oil		
	Rated Capacity, MMBtu/hr		
	No. 5	No. 6, 10-100	No. 6, >100
UNITS	Lb/ 1000 Gallons		
PM	10	3.22	3.22
PM-10	8.6	2.7692	2.7692
SO2	158	157	158
NOx	55	55	55
VOC	0.28	0.28	0.28
CO	5	5	5
SOURCE	FIRE 5.0		
Wt% Sulfur:	NA	0	0

	Distillate Oil		
	Rated Capacity, MMBtu/hr		
	No. 1 & 2	No. 4	Waste # 4*
UNITS	Lb/ 1000 Gallons		
PM	2	7	64
PM-10	2	7	57
SO2	157(s)	150(s)	107(s)
NOx	24	47	16
VOC	0.2	0.2	0.1
CO	5	5	2.1
SOURCE	AP-42 Table 1.3 9/98; 1.11 1/95		
Wt%Sulfur=	0.5	Wt. % Ash =	1
* AP-42 1.11-4		Wt%Sulfur=	0.75

	Natural Gas Emission Factors		
	Rated Capacity, MMBtu/hr		
	< 10 *	10-100	> 100
UNITS	Lb/ MMCF		
PM	7.6	7.6	7.6
PM-10	7.6	7.6	7.6
SO2	0.6	0.6	0.6
NOx	100	100	**280**
VOC	5.5	5.5	5.5
CO	84	84	84
SOURCE	AP-42 Table 1.4 7/98		

* 1-05-001-06 Natural gas space heater

SAMPLE CALCULATION	MMCF / YR	X	LB / MMCF	X	TONS / LB	=	TONS / YR

Former Hanson Plant Emission Unit ID 02(01)

UNLIMITED POTENTIAL TO EMIT

Source	Fuel Source	Consumption Units	SCC ID Code	mmbtu/hr Rating	Annual Hrs Operation	Annual Fuel Consumption	PM10 (lb/hr)	PM10 (Ton/Yr)	PM (lb/hr)	PM (Ton/Yr)	SO2 (lb/hr)	SO2 (Ton/Yr)	NOX (lb/hr)	NOX (Ton/Yr)	VOC (lb/hr)	VOC (Ton/Yr)	CO (lb/hr)	CO (Ton/Yr)
Aggreg. Dryer	Nat gas	MMCF	10200601	130.0	8760.0	1138.8	0.99	4.33	0.99	4.33	0.08	0.34	36.40	**159.43**	0.72	**3.13**	10.92	**47.83**
Aggreg. Dryer	No. 2 oil	1000 gal		130.0	8760.0	8134.3	1.86	8.13	1.86	8.13	72.89	319.27	22.29	97.61	0.19	0.81	4.64	20.34
Aggreg. Dryer	No. 4 waste	1000 gal	10500113	130.0	8760.0	8134.3	52.93	**231.83**	59.43	**260.30**	74.52	**326.39**	14.86	65.07	0.09	0.41	1.95	8.54
Hot oil heater	Nat gas	MMCF	10200601	2.00	8760.0	17.5	0.02	0.07	0.02	0.07	0.00	0.01	0.20	0.88	0.01	0.05	0.17	0.74

Note: Potential to Emit SO2 is greater than 25 tpy or 10 lb/hr. Therefore, facility is limited to 0.5 lb SO2 / MMBtu for distillate oil combustion (No. 2 oil, No. 4 oil, and No. 4 waste oil).

Uncontrolled aggregate drying PTE

		PM lbs/ton	PM10 lbs/ton
Emission Unit ID 2	500 tons/hr	19.0	4.4
	tons/yr	41610.0	9636.0

Unlimited Potential to Emit PM10 from Vehicle Travel on Unpaved Roads

Appendix A: FESOP Emission Calculations

TSD Appendix

Company Name:	Milestone Contractors
Plant Location:	4202 & 4506 South Harding Street
County:	Marion
FESOP No.:	F097-5501-00086
Modification #:	097-12866
Date:	March 21, 2002
Permit Reviewer:	MBC

$$E = \frac{(k * s * S * W^{0.7} * w^{0.5}}{(263.309)} \quad \frac{(365-p)}{(365)}$$ = lb particulate/vehicle mile traveled on unpaved roads (AP-42, 13.2.2)

k =	0.36	particle size multiplier for PM10 (constant)
s =	4.8	silt content of road surface material (%), unspecified municipal roads
p =	120	number of days with at least 0.01 inch of precipitation (per year)

S = mean vehicle speed (mph)
W = mean vehicle weight (tons)
w = number of wheels

Vehicle Type	Mean Speed (mph)	Mean Weight (tons)	# of Wheels	Trip (mi) Distance	# Trips per Hour	Total Miles (One Day)	Day/Year	E (lb/VMT)	PM10 (ton/yr)
50 t truck	10	79	6	0.043	4.35	4.49	365	2.30	1.88
30 t truck	10	52	6	0.043	4.35	4.49	365	1.71	1.40
Front-end loader	10	53.4	4	0.043	23.7	24.46	365	1.43	6.37
						Total fugitive PM10 emissions =			**9.65**
						Fugitive PM10 emission control =			**50.00%**
						Total fugitive PM10 emissions =			**4.83**

Example

$$E = \frac{(0.36 * 6 * 10 * 40^{0.7} * 18^{0.5})}{(263.309)} \quad \frac{(365-120)}{(365)} = 3.09$$ lb PM10/VMT

Unlimited Potential to Emit PM from Vehicle Travel on Unpaved Roads

Appendix A: FESOP Emission Calculations **TSD Appendix**

Company Name:	Milestone Contractors
Plant Location:	4202 & 4506 South Harding Street
County:	Marion
FESOP No.:	F097-5501-00086
Modification #:	097-12866
Date:	March 21, 2002
Permit Reviewer:	MBC

$$E = \frac{(k * s * S * W^{0.7} * w^{0.5}}{(263.309)} \frac{(365-p)}{(365)}$$ = lb particulate/vehicle mile traveled on unpaved roads (AP-42, 13.2.2)

k =	0.80	particle size multiplier for PM10 (constant)
s =	4.8	silt content of road surface material (%), unspecified municipal roads
p =	120	number of days with at least 0.01 inch of precipitation (per year)

S = mean vehicle speed (mph)
W = mean vehicle weight (tons)
w = number of wheels

Vehicle Type	Mean Speed (mph)	Mean Weight (tons)	# of Wheels	Trip (mi) Distance	# Trips per Hour	Total Miles (One Day)	Day/Year	E (lb/VMT)	PM (ton/yr)
50 t truck	10.00	79.00	6.00	0.04	4.35	4.49	365.00	5.11	4.18
30 t truck	10.00	52.00	6.00	0.04	4.35	4.49	365.00	3.81	3.12
Front-end loader	10.00	53.40	4.00	0.01	23.70	24.46	365.00	3.17	14.15
						Total fugitive PM emissions =			**21.46**
						Fugitive PM emission control =			**50.00%**
						Total fugitive PM emissions =			**10.73**

Example

$$E = \frac{(0.8 * 6 * 10 * 40^{0.7} * 18^{0.5})}{(263.309)} \frac{(365-120)}{(365)} = 6.87$$ lb PM10/VMT

Unlimited Potential to Emit from Material Handling

Appendix A: FESOP Emission Calculations

TSD Appendi

Company Name:	Milestone Contractors
Plant Location:	4202 & 4506 South Harding Street
County:	Marion
FESOP No.:	F097-5501-00086
Modification #:	097-12866
Date:	March 21, 2002
Permit Reviewer:	MBC

AP-42 11.19.2-4: emission factors for crushed stone processing

Operation	Number of Points	Individual Rate (ton/hr)	EF: PM10 Uncontrolled (lb/ton)	EF: PM10 Controlled (lb/ton)	Uncontrolled PM10 (ton/yr)	Controlled PM10 (ton/yr)
Conveyor trans.	5.00	500.00	0.0014	0.000048	15.33	0.53
Screening	1.00	500.00	0.0150	0.000840	32.85	1.84
Front end loader	1.00	500.00	0.0014	0.000048	3.07	0.11
				Total PM10	**51.2**	**2.5**

Per AP-42 11.19.2-6c: PM = PM10 x 2.1

Operation	Number of Points	Individual Rate (ton/hr)	EF: PM Uncontrolled (lb/ton)	EF: PM Controlled (lb/ton)	Uncontrolled PM (ton/yr)	Controlled PM (ton/yr)
Conveyor trans.	5.00	500.00	0.0029	0.000101	32.19	1.10
Screening	1.00	500.00	0.0315	0.001764	68.99	3.86
Front end loader	1.00	500.00	0.0029	0.000101	6.44	0.22
				Total PM	**107.6**	**5.2**

PM and PM10 Emissions from Storage Piles

Appendix A: FESOP Emission Calculations

Company Name:	Milestone Contractors	
Plant Location:	4202 & 4506 South Harding Street	TSD Append
County:	Marion	
FESOP No.:	F097-5501-00086	
Modification #:	097-12866	
Date:	March 21, 2002	
Permit Reviewer:	MBC	

AP42 11.2-3.1 (1987)

s = silt content of aggregate, worst case (%) =	1.20
f = % time when wind > 12 mph at mean pile height =	15.00
p = no. of days/yr with > 0.01" pricipitation =	125.00
PC = total pile capacity (acres) =	2.63

EF [lb/day/acre] = 1.7 * (s/1.5) * [(365-p)/235] * (f/15)

EF [lb/day/acre] = 1.7 * (1.2/1.5) * [(365-125)/235] * (15/15)

EF [lb/day/acre] = 1.389

PM emissions = PC * EF * 365 day/yr * ton/2000 lbs

PM emissions = 2.63 acres * 1.389 lb/day/acre * 365 day/yr * ton/2000 lbs

PM emissions = 0.67 tons per year

PM10 = PM / 2.1= 0.32 tons per year

Per AP-42 11.19.2-6c: PM = PM10 * 2.1

VOC emissions from Cutback Asphalt

Appendix A: FESOP Emission Calculations

Company Name:	Milestone Contractors
Plant Location:	4202 & 4506 South Harding Street
County:	Marion
FESOP No.:	F097-5501-00086
Modification #:	097-12866
Date:	March 21, 2002
Permit Reviewer:	MBC

1998 Review

VOC limit x (11/12) - VOC emisions from dryer and hot oil heater = Ton/yr VOC available = 21.70 ton/yr available

21.25 ton limit / yr * 1 / .95 * 1 / 7 * 2000 = 6526.32 gal diluent / yr

gal diluent / yr * (7.0 lb / gal dil + (1 - % dil / % dil)) * 8.28 lbs / gal CM 300 / 2000 = 2864.01 ton / yr liquid binder

2002 Significant Revision

The following calculations determine the amount of VOC emissions created by the application of cold mix containing gelled asphalt, of which 2.5% by weight of input VOC is evaporated and limited to 97.07 tons per year such that 326 IAC 2-7 does not apply:

X x 0.025 weight percent flash off of cold mix = 97.0 tons VOC/yr

X = 97.0 / 0.025

X = 3880 tons VOC solvent

Combined HAP Emissions

Appendix A: FESOP Emission Calculations

Company Name: Milestone Contractors
Plant Location: 4202 & 4506 South Harding Street
County: Marion
FESOP No.: F097-5501-00086
Modification #: 097-12866
Date: March 21, 2002
Permit Reviewer: MBC

Source	Aggregate Throughput (ton/hr)	Throughput (ton/yr)	Emission Factor (lb/ton)	Combined HAPs (lb/hr)	Combined HAPs (ton/yr)
NG					
Unlimited					
Agg. Mixer/dryer	500	4,380,000	0.005980	2.99	13.10
Limited					
Agg. Mixer/dryer oil	500	1,466,650	0.005980	2.99	4.39
Agg. Mixer/dryer NG	500	1,319,865	0.007580	3.79	5.00

AP-42 11.1-14 through 11.1-16
SCC 3-05-002-05

Revised For 12/00 AP-42 Emission Factors & 2002 Revision to Add Hanson Aggregates

Source	Aggregate Throughput (ton/hr)	Throughput (ton/yr)	Emission Factor (lb/ton)	Combined HAPs (lb/hr)	Combined HAPs (ton/yr)	Highest Single HAP (Formaldehyde) (lbs/ton)	Highest Single HAP (Formaldehyde) (lbs/hr)	Highest Single HAP (Formaldehyde) (tons/yr)
Unlimited								
Agg. Mixer/dryer - Nat Gas	500	4,380,000	0.005300	2.65	11.61	0.0031	1.55	6.79
Agg. Mixer/dryer - # 2 Oil	500	4,380,000	0.008700	4.35	19.05	0.0031	1.55	6.79
Agg. Mixer/dryer - Waste Oil	500	4,380,000	0.010000	5.00	**21.90**	0.0031	1.55	**6.79**
Agg. Mixer/dryer - Nat Gas	350	3,066,000	0.005300	1.86	8.12	0.0031	1.09	4.75
Agg. Mixer/dryer - # 2 Oil	350	3,066,000	0.008700	3.05	13.34	0.0031	1.09	4.75
Agg. Mixer/dryer - Waste Oil	350	3,066,000	0.010000	3.50	**15.33**	0.0031	1.09	**4.75**
			highest combination		**37.23**		**highest single HAP**	**11.54**
Limited								
Agg. Mixer/dryer - Nat Gas	500	4,380,000	0.005300	2.65	**6.85**	0.0031	1.55	**4.01**
Agg. Mixer/dryer - # 2 Oil	500	4,380,000	0.008700	4.35	5.72	0.0031	1.55	2.04
Agg. Mixer/dryer - Waste Oil	500	4,380,000	0.010000	5.00	5.69	0.0031	1.55	1.77
Agg. Mixer/dryer - Nat Gas	350	3,066,000	0.005300	1.86	**4.79**	0.0031	1.09	**2.80**
Agg. Mixer/dryer - # 2 Oil	350	3,066,000	0.008700	3.05	4.00	0.0031	1.09	1.43
Agg. Mixer/dryer - Waste Oil	350	3,066,000	0.010000	3.50	**3.99**	0.0031	1.09	1.24
			highest combination		**11.64**		**highest single HAP**	**6.81**

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Limited Throughput estimated by the ratio of the fuel cap to unlimited fuel consumption and equating that to the ratio of limited asphalt production

Nat gas limited to 694.5 MMCF/yr / 1182.6 unlimited consumption = 59% of total
2 oil limited to 2522 kgal/yr / 8447.1 kgal unlimited = 30% of total
Waste oil limited to 2234.3 kgal/yr / 8447.1 kgal unlimited = 26% of total

Appendix A: FESOP Emission Calculations

Company Name:	Former Hanson Aggregates, Inc.
Plant Location:	4506 South Harding Street
County:	Marion
FESOP No.:	F097-12083-05160
Modification #:	097-12866
Date:	March 21, 2002
Permit Reviewer:	MBC

I. Potential Emissions

A. Source emissions before controls

*** * conveying / handling * ***

PM-10 Emissions Per Operation:

350 ton/hr * 8,760 hrs/yr * Ef (lb/ton of material) * Number of Similar Operations = (ton/yr)
2,000 lb/ton

Operation						
Truck Loading:	1	operation(s)	1.0E-04	lb/ton of material =	0.15	ton/yr
Conveyor Transfers:	5	operation(s)	4.8E-05	lb/ton of material =	0.37	ton/yr
Screening:	1	operation(s)	8.4E-04	lb/ton of material =	1.29	ton/yr
Silos	3	operation(s)	1.0E-04	lb/ton of material =	0.46	ton/yr
				Total PM 10 Emissions:	**2.27**	**ton/yr**
				Total PM Emissions:	**4.76**	**ton/yr**

*** * unpaved roads * ***

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 13.2.2.2.

Vehicle Traffic

12.5 trip/hr x
0.025 mile/trip x
2 (round trip) x
8,760 hr/yr = 5475 miles per year

Ef = k*5.9*(s/12)*(S/30)*(W/3)^0.7*(w/4)^0.5*((365-p)/365)
= 4.19 lb/mile
where k = 0.8 (particle size multiplier)
s = 4.8 % silt content of unpaved roads
p = 120 days of rain greater than or equal to 0.01 inches
S = 10 miles/hr vehicle speed
W = 32.50 tons average vehicle weight
w = 14 wheels

4.19 lb/mi x 5475 mi/yr = **11.47** tons/yr
2000 lb/ton

P M-10: 35% of PM = **4.01** tons/yr

Appendix A: FESOP Emission Calculations

Company Name:	Former Hanson Aggregates, Inc.
Plant Location:	4506 South Harding Street
County:	Marion
FESOP No.:	F097-12083-05160
Modification #:	097-12866
Date:	March 21, 2002
Permit Reviewer:	MBC

****storage piles****

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Sample Calculation: Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)

Ef=	5.55	lb/acre/day
where s =	4.8	% silt
p =	125	days of rain greater than or equal to 0.01 inches
f =	15	% of wind greater than or equal to 12 mph

$$Ep\ (storage) = \frac{Ef * (Pile\ Size\ in\ acres) * (365\ day/yr)}{(2{,}000\ lb/ton)}$$

PM = **1.01 tons/yr** **P M-10:** 35% of PM = **0.35 tons/yr**

*** * aggregate drying before controls * ***

P M:	19.0	lb/ton =	**29127.0 ton/yr**
P M-10:	4.4	lb/ton =	**6745.2 ton/yr**
VOC:	0.0	lb/ton =	**0.0 ton/yr**
CO:	0.0	lb/ton =	**0.0 ton/yr**
NOx:	0.0	lb/ton =	**0.0 ton/yr**
SO2:	0.0	lb/ton =	**0.0 ton/yr**

based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Tables 11.1-5, 11.1-8

*** * Aggregate dryer fuel usage limitations for initial FESOP review* ***

Primary Fuel Usage Limitation - Natural Gas

In order to qualify for the FESOP program, this facility must limit NOx emissions from natural gas combustion to 99 tons per year. The NOx emissions from the aggregate dryer must be limited to (99.0 - 0.88 tons/yr from hot oil heater) = 98.12 tons per year.

The following calculations determine the amount of NOx emissions created by natural gas combustion with a fuel usage lin 1,032.08 MMcf/year in order to limit potential NOx emissions to 99.0 tons/yr.

Fuel Oil: Natural Gas

$$98.12\ \frac{tons\ NOx/year\ limited}{108.19\ tons\ NOx/year\ potential} * 1138.00\ \frac{MMCF}{year\ potential} = 1032.08\ \frac{MMCF}{year\ limited}$$

Natural Gas: $\frac{1032.08\ MMcf/year * Ef\ (lb/MMcf) = (ton/yr)}{2{,}000\ lb/ton}$

Aggregate dryer Emissions Summary after Fuel Usage Limitations

P M:	7.60	lb/MMcf =	**27.67 ton/yr**
P M-10:	7.60	lb/MMcf =	**24.28 ton/yr**
S O 2:	0.6	lb/MMcf =	**0.30 ton/yr**
N O x:	190.0	lb/MMcf =	**98.05 ton/yr**
V O C:	5.5	lb/MMcf =	**2.84 ton/yr**
C O:	84.0	lb/MMcf =	**43.05 ton/yr**

Appendix A: FESOP Emission Calculations

Company Name: Former Hanson Aggregates, Inc.
Plant Location: 4506 South Harding Street
County: Marion
FESOP No.: F097-12083-05160
Modification #: 097-12866
Date: March 21, 2002
Permit Reviewer: MBC

*** * source emissions prior to controls, except fugitives * ***

hot oil burner			nonfugitive				
P M:	0.07	ton/yr x	100.00%	emitted after controls =		**0.07**	**ton/yr**
P M-10:	0.07	ton/yr x	100.00%	emitted after controls =		**0.07**	**ton/yr**
aggregate drying:			nonfugitive				
P M:	29127.00	ton/yr x	100.00%	emitted after controls =		**29127.00**	**ton/yr**
P M-10:	6745.20	ton/yr x	100.00%	emitted after controls =		**6745.20**	**ton/yr**
bin loading & conveying:			fugitive				
P M:	4.76	ton/yr x	50%	emitted after controls =		**2.38**	**ton/yr**
P M-10:	2.27	ton/yr x	50%	emitted after controls =		**1.14**	**ton/yr**
screening & batch drops:			nonfugitive				
P M:	1.10	ton/yr x	4.29%	emitted after controls =		**0.05**	**ton/yr**
P M-10:	0.90	ton/yr x	4.29%	emitted after controls =		**0.04**	**ton/yr**
unpaved roads:			fugitive				
P M:	11.47	ton/yr x	50%	emitted after controls =		**5.74**	**ton/yr**
P M-10:	4.01	ton/yr x	50%	emitted after controls =		**2.01**	**ton/yr**
storage piles:			fugitive				
P M:	1.01	ton/yr x	50%	emitted after controls =		**0.51**	**ton/yr**
P M-10:	0.35	ton/yr x	50%	emitted after controls =		**0.18**	**ton/yr**

Hazardous Air Pollutants (HAPs)

*** * HAP's - aggregate drying * ***

The following calculations determine the amount of HAP emissions created by aggregate drying before & after controls, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table 11.1-9 for a batch mix dryer which can be fired with either fuel oil or natural gas. The HAP emission factors represent the worst case emissions (natural gas combustion).

Pollutant:	Ef	lb/ton x	350	ton/hr x	8760	hr/yr
			2000	lb/ton		

Hazardous Air Pollutants (HAPs):			Potential To Emit	
Acetaldehyde:	6.40E-04	lb/ton =	0.98	ton/yr
Benzene:	3.50E-04	lb/ton =	0.54	ton/yr
Ethylbenzene:	3.30E-03	lb/ton =	5.06	ton/yr
***Formaldehyde:**	8.60E-04	lb/ton =	1.32	ton/yr
Quinone:	2.70E-04	lb/ton =	0.41	ton/yr
Toluene:	1.80E-03	lb/ton =	2.76	ton/yr
****Total Polycyclic Organic Matter (POM):**	1.270E-04	lb/ton =	0.19	ton/yr
Xylene:	4.30E-03	lb/ton =	6.59	ton/yr
		Total HAPs =	17.85	ton/yr

Appendix A: FESOP Emission Calculations

Company Name: Milestone Contractors
Plant Location: 4202 & 4506 South Harding Street
County: Marion
FESOP No.: F097-5501-00086
Modification #: 097-12866
Date: March 21, 2002
Permit Reviewer: MBC

Existing Plant 2

	PM	PM-10	SO2	NOx	CO	VOC	Highest HAP	HAP Combination
Process (Dryer Fuel)	270.31	240.74	338.94	165.56	49.67	3.25		
Process (Dryer)	41610.00	9636.00	0.00	0.00	0.00	0.00	7.90	15.00
Unpaved Roads	10.73	4.83	0.00	0.00	0.00	0.00		
Handling	5.20	2.47	0.00	0.00	0.00	0.00		
Storage Piles	0.67	0.32	0.00	0.00	0.00	0.00		
Cut Back	0.00	0.00	0.00	0.00	0.00	21.70		
Insignificant (Hot Oil Heater)	0.07	0.07	0.01	0.88	0.74	0.05		
Total Source PTE	**41896.97**	**9884.43**	**338.95**	**166.44**	**50.41**	**25.00**	7.90	15.00

Existing Plant 02(01)
with conversion to oil/waste oil

	PM	PM-10	SO2	NOx	CO	VOC	Highest HAP	HAP Combination
Process (Dryer Fuel)	260.3	231.83	326.39	159.43	47.83	3.13		
Process (Dryer)	29127.00	6745.20	0.00	0.00	0.00	0.00	6.59	17.80
Unpaved Roads	5.74	2.01	0.00	0.00	0.00	0.00		
Handling	2.43	1.19	0.00	0.00	0.00	0.00		
Storage Piles	0.51	0.18	0.00	0.00	0.00	0.00		
Cut Back	0.00	0.00	0.00	0.00	0.00	0.00		
Insignificant (Hot Oil Heater)	0.07	0.07	0.01	0.88	0.74	0.05		
Total Source PTE	**29396.05**	**6980.48**	**326.40**	**160.31**	**48.57**	**3.18**	6.59	17.80

Combined Operations
with conversion to oil/waste oil

	PM	PM-10	SO2	NOx	CO	VOC	Highest HAP	HAP Combination
Process (Dryer Fuel)	530.61	472.57	665.33	324.99	97.50	6.38		
Process (Dryer)	70737	16381.20	0.00	0.00	0.00	0.00	11.50	37.40
Unpaved Roads	16.47	6.84	0.00	0.00	0.00	0.00		
Handling	7.63	3.66	0.00	0.00	0.00	0.00		
Storage Piles	1.18	0.50	0.00	0.00	0.00	0.00		
Cut Back	0	0.00	0.00	0.00	0.00	21.70		
Insignificant (Hot Oil Heater)	0.14	0.14	0.02	1.76	1.48	0.10		
Total Source PTE	**71293.02**	**16864.91**	**665.35**	**326.75**	**98.98**	**28.18**	11.50	37.40

Fuel Equivalency
Determination (highest individual PTE)

	PM/PM10	SO2	NOx	VOC	CO
Natural Gas	8.8	0.7	324.9	6.4	97.5
# 2 Oil	16.9	650.8	199.0	1.7	41.5
Waste Oil	530.6	665.3	132.7	0.8	17.4

Pollutants > 100 tpy: Natural Gas for NOx; SO2 & NOx for # 2 oil; PM/PM10, SO2 & NOx for waste oil

Other Emission Unit influences:

Natural Gas

99.00	
-0.88	hot oil heater (EU ID 2)
-0.88	hot oil heater (EUID 02(01))
97.2	tons NOx per year

Waste oil & # 2 oil

99.00	
-0.01	hot oil heater (EU ID 2)
-0.01	hot oil heater (EUID 02(01))
99.00	tons SO2 per year

Waste Oil PM10

99	
-16.38	combined aggregate drying(1 - control eff)
-6.84	combined unpaved roads
-3.66	combined handling
-0.5	combined storage piles
-0.14	combined hot oil heating
71.48	tons PM10 per year

Individual fuel limitation to stay under sourcewide cap:

Natural Gas
97.2 / 324.9 x 2321.4 combined MMCF = 694.5 MMCF/yr

2 oil
99.0 / 650.8 x 16581.4 combined kgal = 2,522 kgal/yr

Waste oil
99.0 / 665.3 x 16581.4 combined kgal = 2,467kgal/yr

Waste oil
71.5 / 530.61 x 16581.4 combined kgal = 2,234.3 kgal/yr

Resultant emissions at fuel cap(s) (tons/yr):

	PM/PM10	SO2	NOx	VOC	CO
Natural Gas	2.6	0.2	97.2	1.9	29.2
# 2 Oil	2.5	98.9	30.3	0.3	6.3
Waste Oil	71.5	89.6	17.8	0.1	2.4

Alternate Fuels as NOx equivalents:

	NOx	emfac	Limit
Natural Gas	280	lbs/MMCF	1.0 MMCF/MMCF
# 2 Oil	24	lbs/kgal	0.086 MMCF/kgal
Waste Oil	16	lbs/kgal	0.057 MMCF/kgal

Example calculation:

24 lbs/kgal / 280 lbs/MMCF = 0.086 MMCF/kgal

Alternate Fuels as SO2 equivalents:

	SO2	emfac	Limit
Natural Gas	0.6	lbs/MMCF	0.008 kgal/MMCF
# 2 Oil	157(s)	lbs/kgal	1.0 kgal/kgal
Waste Oil	107(s)	lbs/kgal	1.02 kgal/kgal

0.6 lbs/MMCF / 157(s) lbs/kgal = 0.008 kgal/MMCF

Alternate fuels as PM10 equivalents:

	PM10	emfac	Limit
Natural Gas	7.6	lbs/MMCF	0.13 kgal/MMCF
# 2 Oil	2.0	lbs/kgal	0.03 kgal/kgal
Waste Oil	57	lbs/kgal	1.0 kgal/kgal

2.0 lbs/kgal / 57 lbs/kgal = 0.03 kgal/kgal